



*Powering
the customer journey
to the intelligent enterprise*

Manufacturing and Supply Chain and Asset Management in SAP S/4HANA Cloud 2002 Release Update

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PUBLIC

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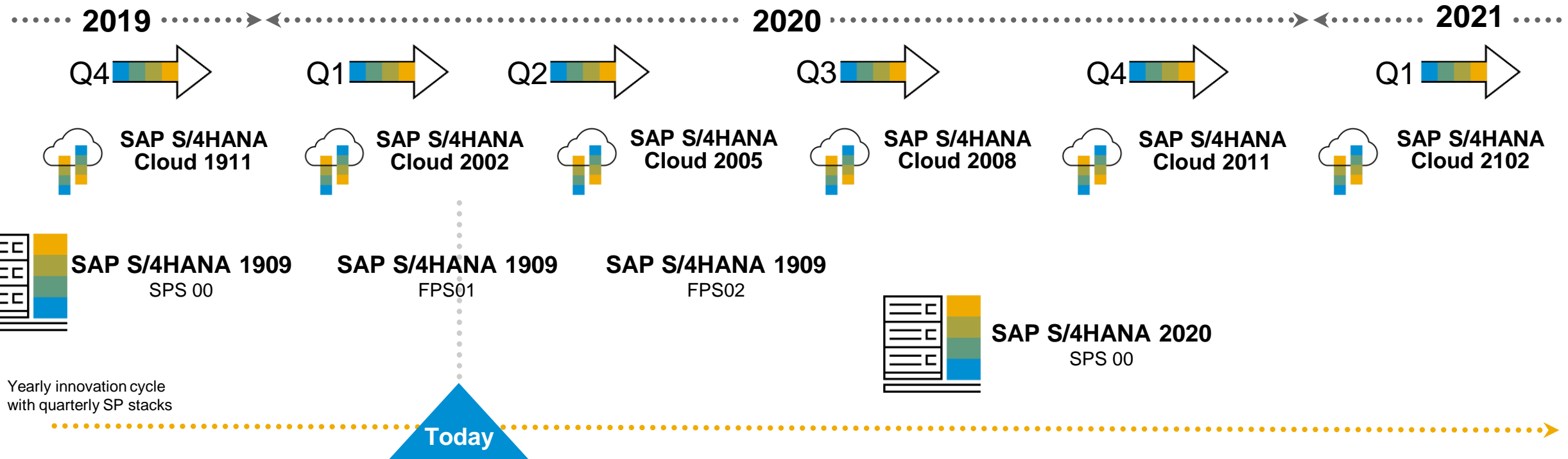
SAP S/4HANA Release Strategy

(2019–2021 and definition of deliveries)



Quarterly innovation cycle

SAP Note [2868297](#) - Release Information Note for SAP S/4HANA Cloud 2002
SAP Note [2868331](#) - Release Restriction Note for SAP S/4HANA Cloud 2002



Agenda

Manufacturing & Supply Chain & Asset Management in SAP S/4HANA Cloud 2002

- Warehouse Management
 - Lean integration between production and warehouse managed on bin level
 - Serial Number Handling in Warehouse Management
 - Attachment Services in Warehouse Management
 - Reduce manual efforts by running warehouse task creation in the background
- Inventory Management - Cycle counting as part of the physical inventory process
- Quality Management
 - Resolve internal problems by using the 8D methodology
 - Inspection results recording for serialized materials
- Production planning and execution
 - Predictive material and resource planning (pMRP)
 - Schedule Production
 - Manage Work Center Capacity
 - Reprocess failed material movements
- Resource Scheduling for Maintenance Planners

Key Innovations in S/4HANA Manufacturing & Supply Chain

aATP

- Customer segmentation
- Automated mass order processing using alternative variants
- Manage shortages along with business priorities
- Improve business rules
- Fast re-plan
- Plant and Material Substitution

DDMRP

- Overcome increasing volatility in demand and shorten lead-time
- Keep inventory at the most optimum amount to deal with variation at minimum cost across the chain
- Driving replenishment on actual demand, not forecasts. The best use of assets is to make what is needed and what sells.
- Propose decoupling points and buffer levels

pMRP

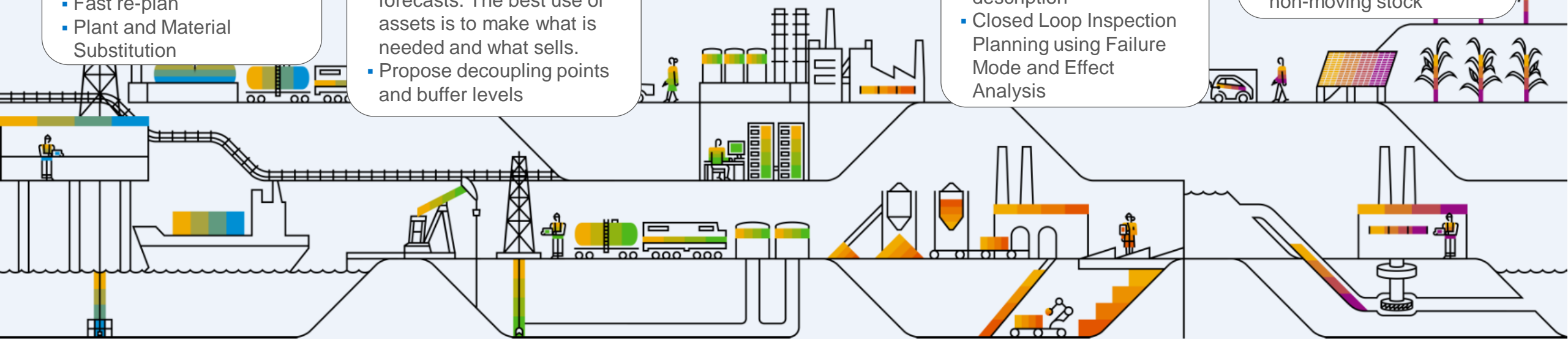
- Simulate future scenarios for the plant to predict capacity and component demand

Quality Management

- Defect code proposal based on problem description
- Closed Loop Inspection Planning using Failure Mode and Effect Analysis

Inventory Management

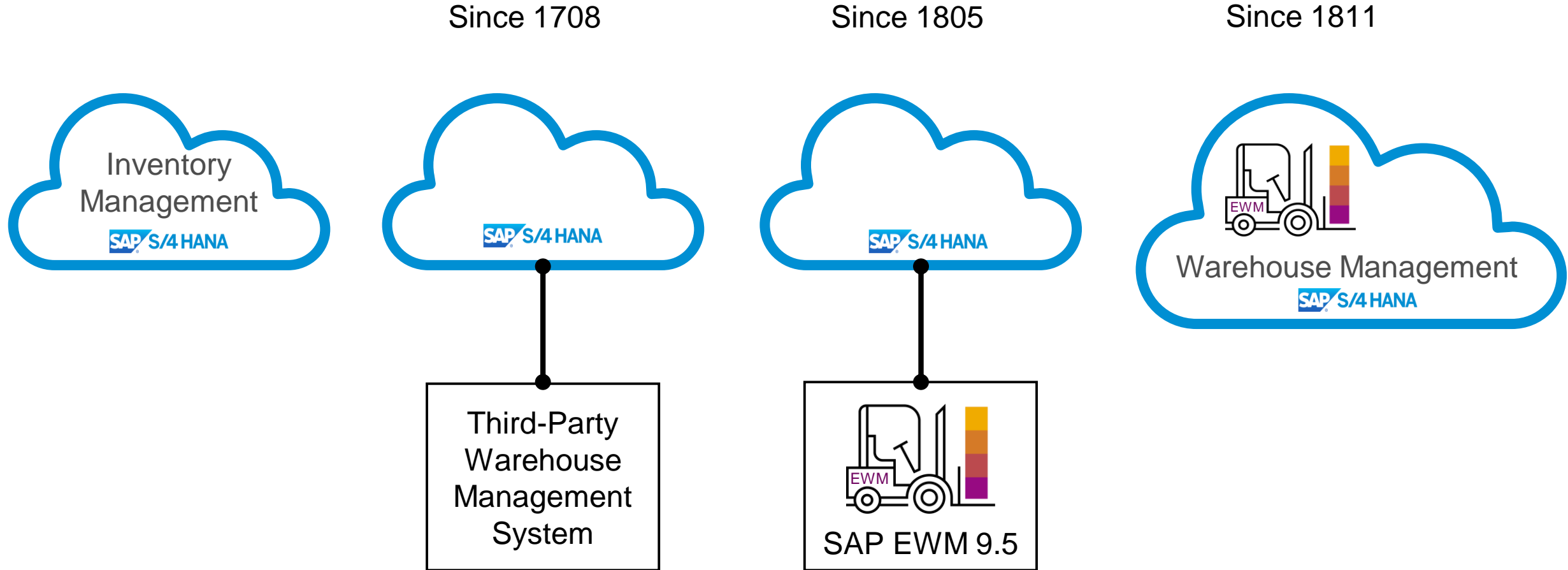
- Predict arrival and manage delivery delays for Stock in Transit
- Pre-built set of Inventory KPIs for analytics with drill down functionality
- Early detection of slow or non-moving stock



Release Highlights

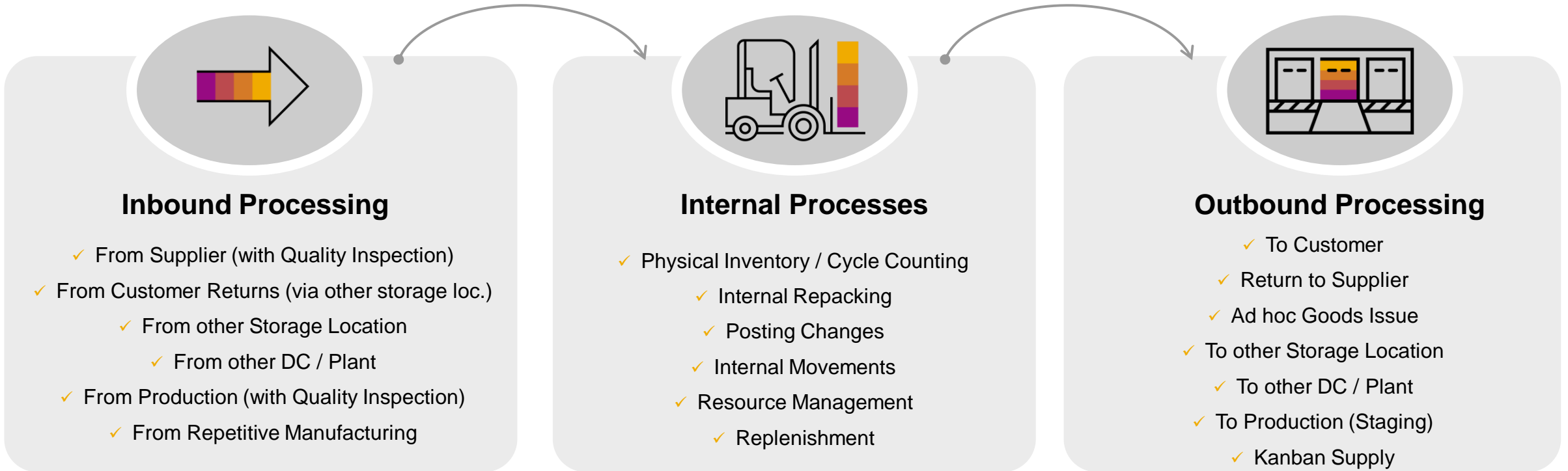
Warehouse Management

SAP S/4HANA Cloud - Warehousing



SAP S/4HANA Cloud - Warehouse Management

Scope in SAP S/4HANA Cloud 2002 Release

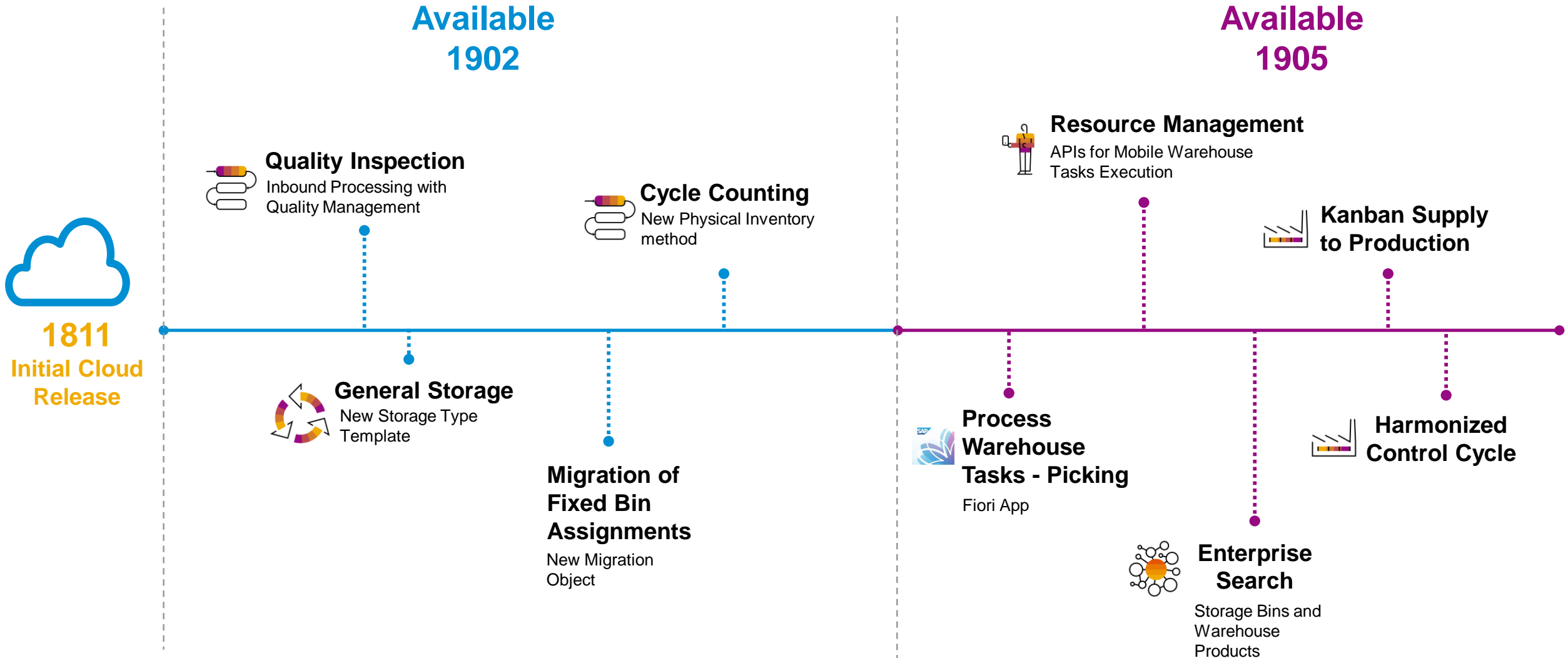


Batch Managed Products / Serial Numbers / Handling Units

Best Practice Processes	Warehouse Structure	Mass Data Migration	Self-Service Configuration UIs	Roles/ Catalogs/Tiles	APIs	Output Management
12	6+4	5	19	2 / 12 / 39	5	7

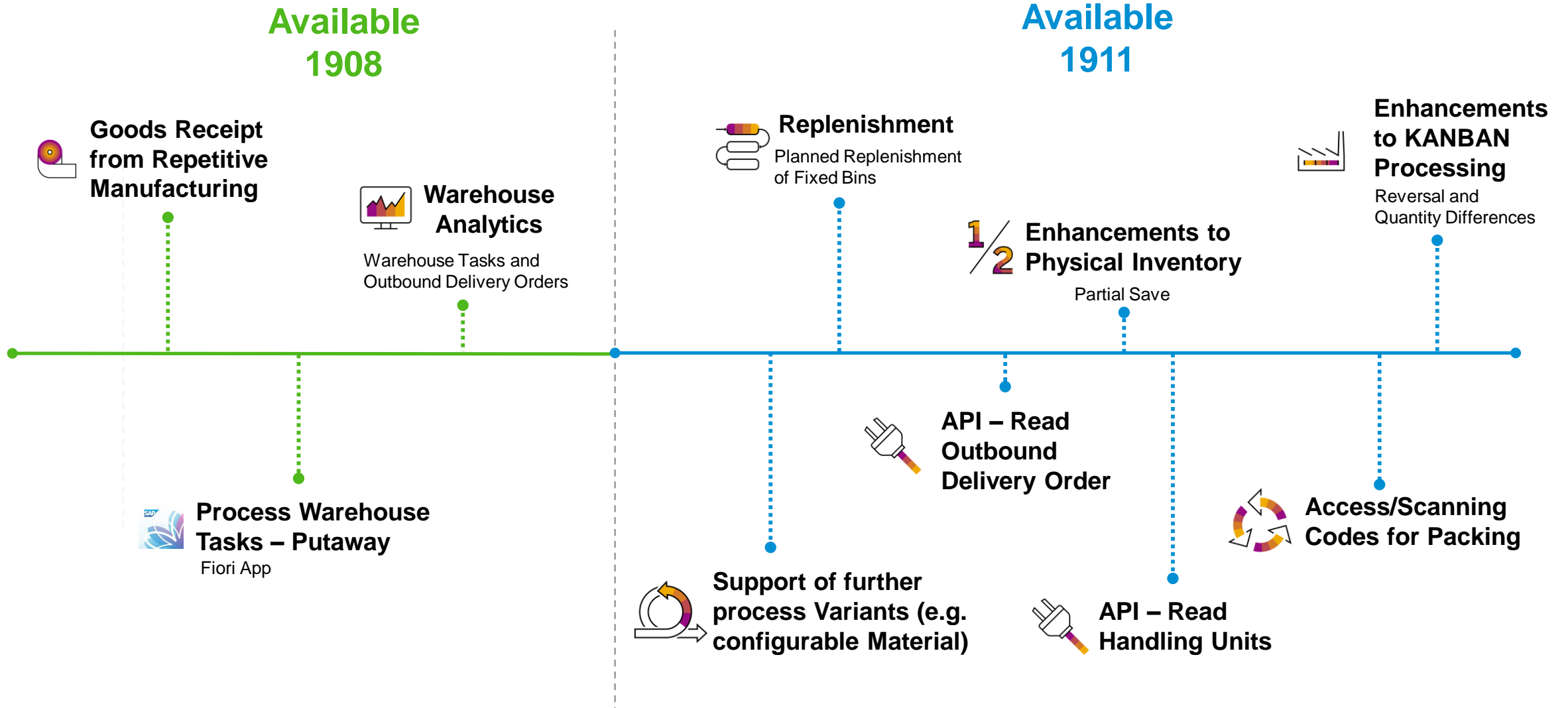
SAP S/4HANA Cloud - Warehouse Management

Innovation in 2019



SAP S/4HANA Cloud - Warehouse Management

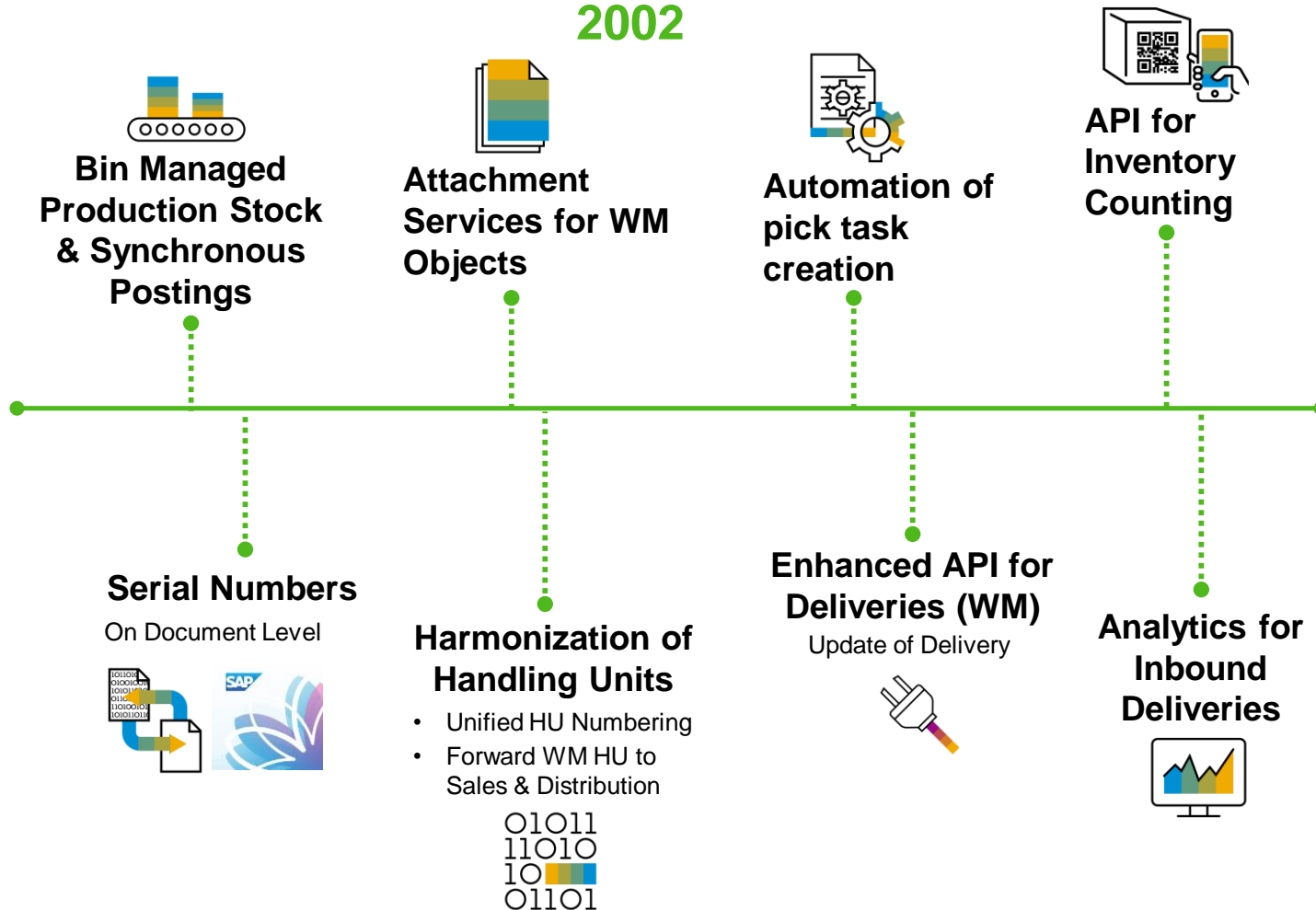
Innovation in 2019



SAP S/4HANA Cloud - Warehouse Management

Innovation in 2020

Available
2022



SAP S/4HANA Cloud - Warehouse Management

Best Practice Processes

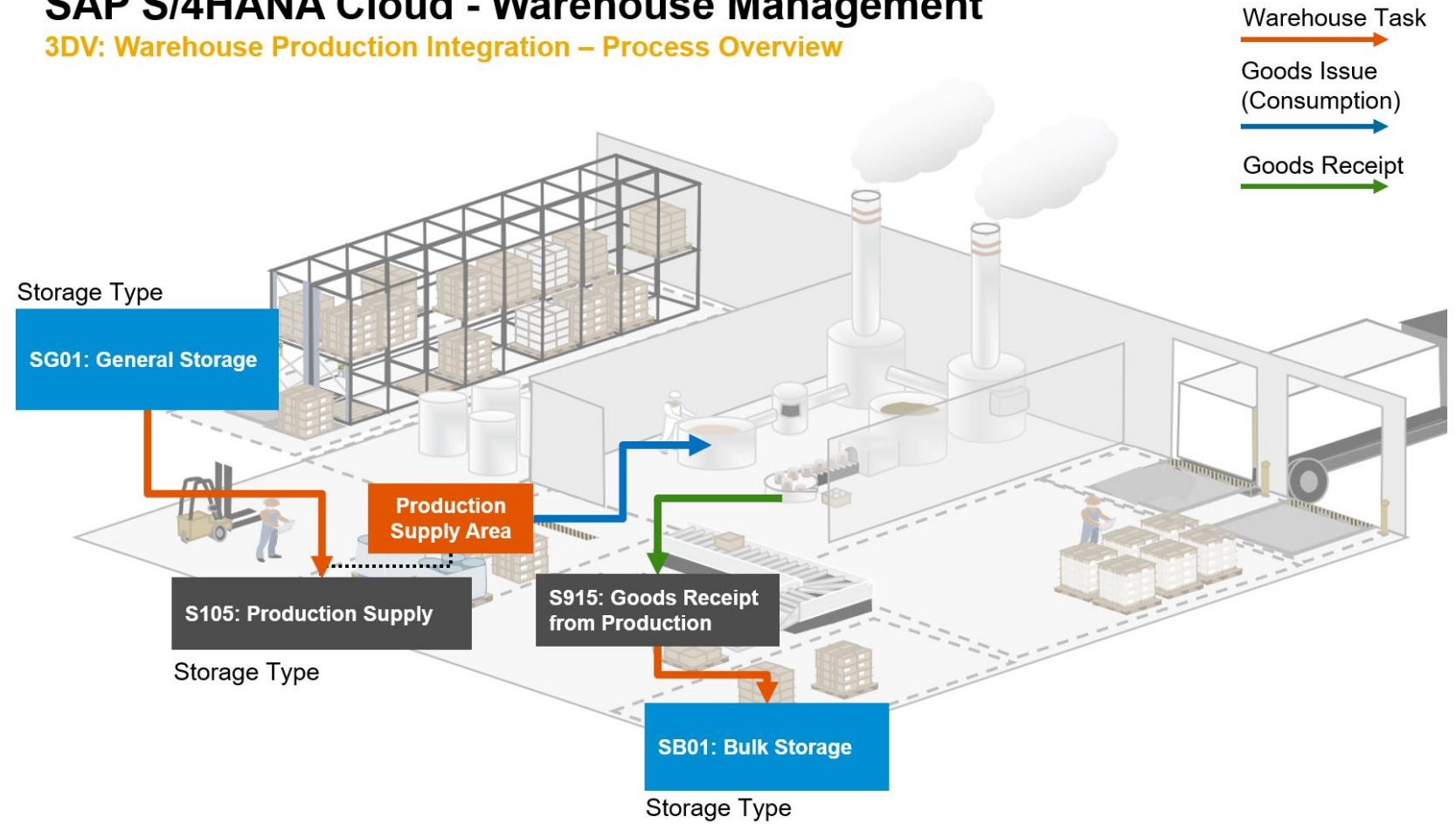
ID	Scope Item Title	Initial Release
3BR	Warehouse Inbound Processing	SAP S/4HANA Cloud 1811
3BS	Warehouse Outbound Processing	SAP S/4HANA Cloud 1811
3BX	Warehouse Physical Inventory	SAP S/4HANA Cloud 1811
3DV	Warehouse Production Integration	SAP S/4HANA Cloud 1811
3BT	Warehouse Ad Hoc Goods Issue	SAP S/4HANA Cloud 1811
3BU	Warehouse Posting Changes	SAP S/4HANA Cloud 1811
3BW	Warehouse Internal Repacking	SAP S/4HANA Cloud 1811
3M0	Quality Management in Warehousing	SAP S/4HANA Cloud 1902
3VT	Warehouse Kanban Supply into Production	SAP S/4HANA Cloud 1905
3W0	Resource Management in Warehousing	SAP S/4HANA Cloud 1905
41U	Warehouse Goods Receipt from Repetitive Manufacturing	SAP S/4HANA Cloud 1908
4A2	Replenishment in Warehousing	SAP S/4HANA Cloud 1911

Lean integration between production and warehouse managed on bin level

SAP S/4HANA Cloud - Warehouse Management

3DV: Warehouse Production Integration – Process Overview

- Lean integration between production and warehouse managed on bin level
- Increase of stock transparency as stock in production is managed on a more-granular level
- Warehouse Management (WM) managed production supply area (PSA)

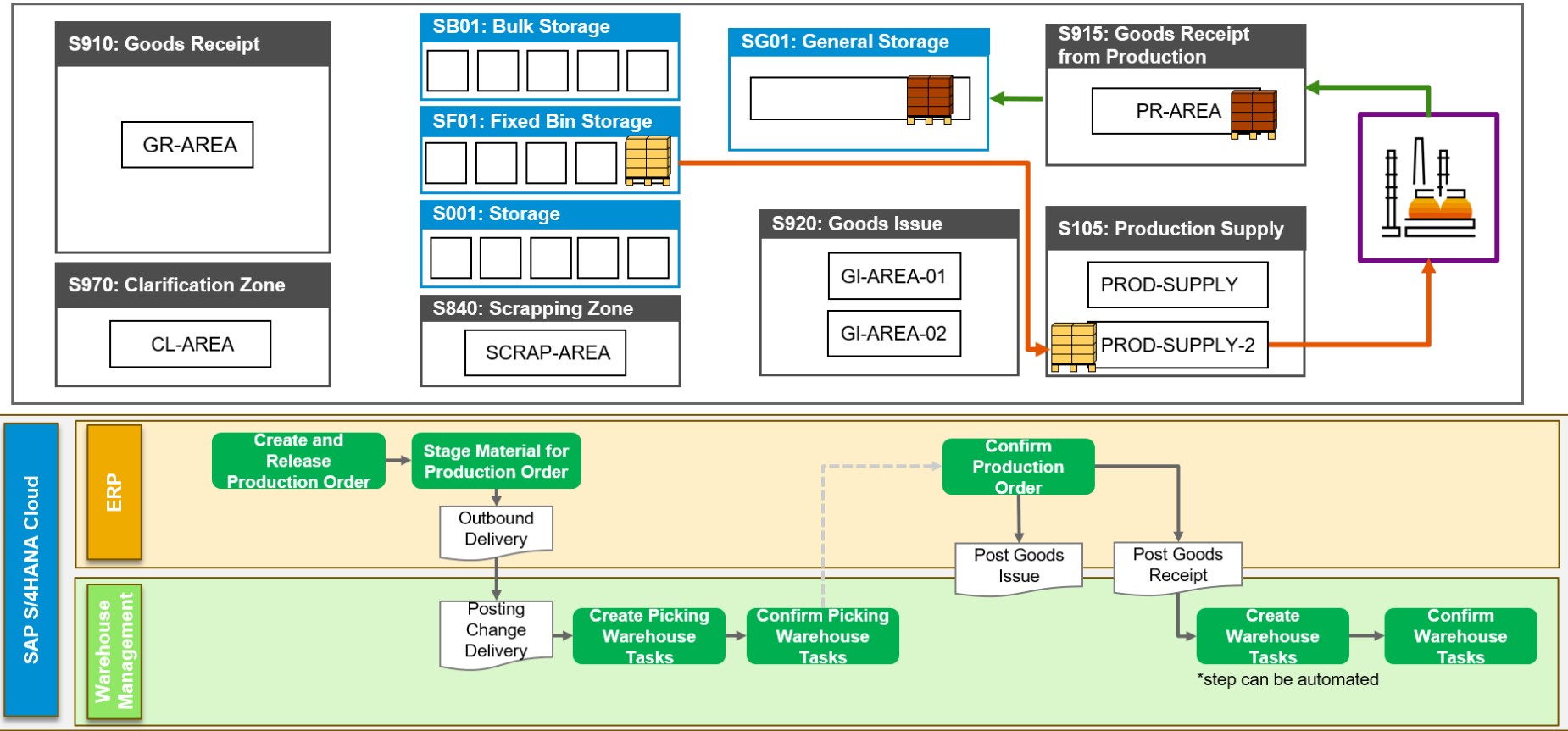


Lean integration between production and warehouse managed on bin level

SAP S/4HANA Cloud Warehouse Management

3DV: Warehouse Production Integration – WM-Managed PSA & Synchronous Goods Movements

- The goods receipt can be posted directly and synchronously (without inbound delivery) in the warehouse
- Components can be consumed directly from the warehouse (without goods issue posting for the outbound delivery)



Serial Number Handling in Warehouse Management

- Improve serial number capabilities for cloud warehouse management
- Visibility: See which customers received which serial numbers
- Integration: Handle serialized products in receiving and shipping processes
- Efficiency: Only enter serial numbers when they arrive at or leave the warehouse

Outbound Delivery Order 80017690

Means of Trans.: Consignee: 10100003 (Inlandskunde DE 3) Picking Executed in % 87% Picked

General Data Items Attachments

Route Depart. Date: 19.12.2019, 00:00 Carrier: Stag. Area: Warehouse Door:

Items

4 All Items 0 Missing Tasks 1 Open Tasks 3 Picked

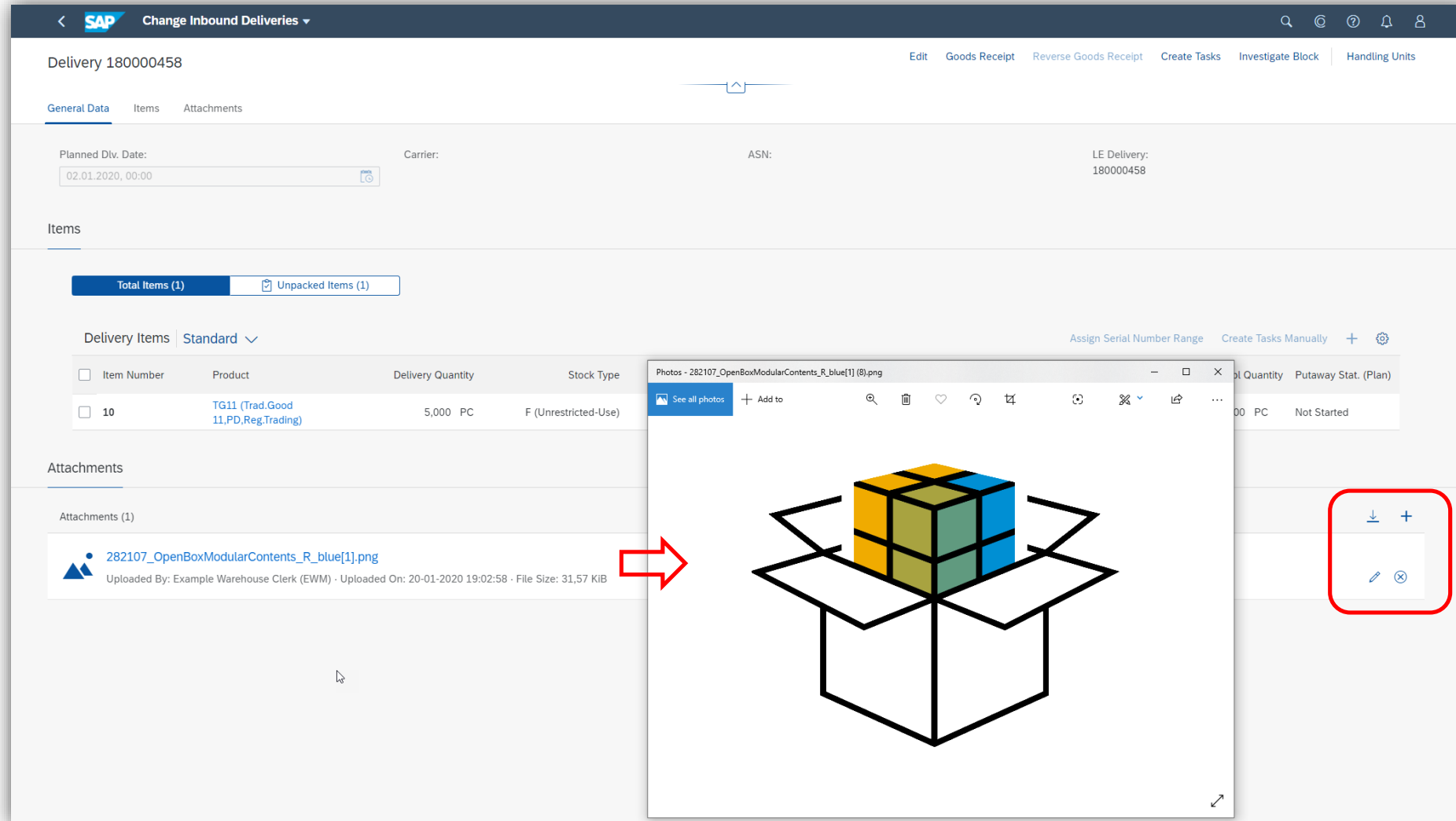
Delivery Items (4) Standard

Assign Serial Number Range Change Delivery Item Quantity Adjust Delivery Quantities (1)

<input type="checkbox"/>	Item Number	Product	Warehouse Tasks	No. of Serial Numbers	Delivery Qty	Batch	Goods Issue	Packing Status
<input checked="" type="checkbox"/>	10	BALL-SERIAL	Warehouse Tasks	0 / 2	2.000	PC	Not Started	Not started
<input type="checkbox"/>	20	BALL-SERIAL	Warehouse Tasks	0 / 1	1.000	PC	Not Started	Not started
<input type="checkbox"/>	30	BALL-SERIAL	Warehouse Tasks	0 / 1	1.000	PC	Not Started	Not started
<input type="checkbox"/>	40	BALL-SERIAL	Warehouse Tasks	0 / 3	3.000	PC	Not Started	Not started

Attachment services in Warehouse Management

- Enable connection of all kinds of media to business documents as additional information
- Improve traceability as related documents from externals can be attached to cloud business objects in warehouse management
- Create, read, update or delete attachments using the SAP Fiori apps
 - Change Inbound Deliveries
 - Run Outbound Process



Reduce manual efforts by running warehouse task creation in the background

- Reduced manual effort by running warehouse task creation in the background
- Create pick warehouse tasks automatically in the background with defined time intervals
- Creation of single run or recurring background warehouse task creation jobs

The screenshot displays the SAP 'New Job' configuration interface. The title bar shows 'SAP' and 'New Job'. The main heading is 'Automatically Creation of Warehouse Task at Picking'. Below this, there are three tabs: 'General Information', 'Scheduling Options', and 'Parameters'. The 'General Information' tab is active, showing 'Job Template' and 'Job Name' both set to 'Automatically Creation of Warehouse Task at Picking'. The 'Scheduling Options' tab is also visible, showing 'Start Immediately' checked and 'Start' set to '15.01.2020, 20:23:02'. The 'Parameters' tab is active, showing 'Create Warehouse Task for Stock Removal'. This tab is divided into four sections: 'Warehouse Number' (with a field for 'Warehouse Number'), 'General Data' (with fields for 'Document Number' and 'Document Type'), 'Administrative Data' (with fields for 'Created By', 'Created On (From)', 'Created At (From)', 'Created On (To)', and 'Created At (To)'), and 'References' (with fields for 'Orig. ERP Document', 'Sales Order', 'Purchase Order', and 'Manufacturing Order'). At the bottom right, there are buttons for 'Schedule', 'Check', 'Template', and 'Cancel'.

Warehouse Management: Further innovations

- [Improve warehouse analytics for inbound delivery](#)

The new CDS view enables you to view some aggregated data relevant to inbound delivery items. For example, the following data is available:

- The number of inbound delivery items in your warehouse
- The number of inbound delivery items that are blocked
- The average goods receipt time of your inbound delivery items

- [Enhanced automation with automatic replenishment strategy](#)

With this feature, you can enable the system to automatically create a replenishment warehouse task in the background to ensure that there is enough stock available for picking activities.

- [Enhanced extensibility with an API for physical inventory](#)

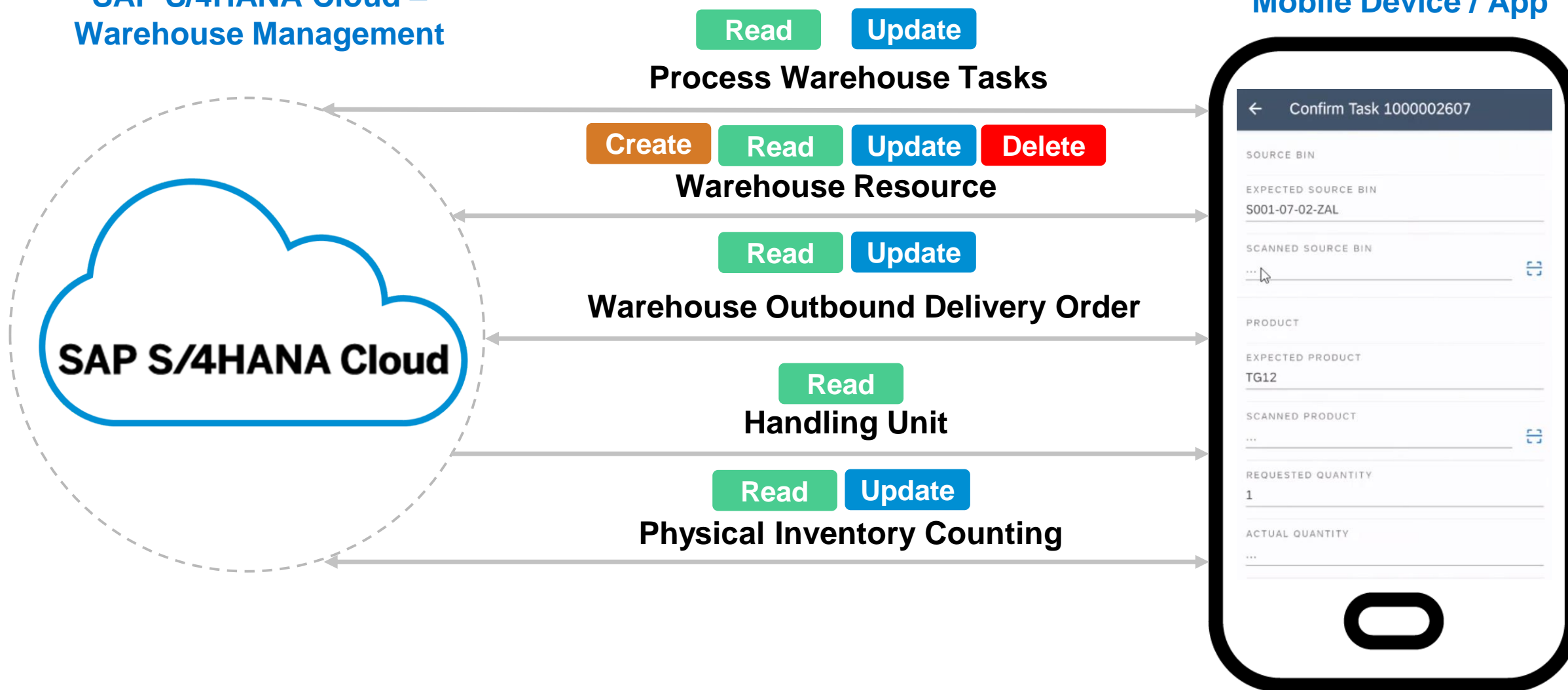
With this service Warehouse Physical Inventory (A2X) (API_WHSE_PHYSINVENTORYITEM), you can count physical inventory (PI) in your warehouse. You can retrieve, count, and change PI items. You can also mark PI items as Deleted.

SAP S/4HANA Cloud - Warehouse Management

Overview of APIs in the Warehouse Management area

SAP S/4HANA Cloud – Warehouse Management

Mobile Device / App



Release Highlights

Inventory Management

Inventory Management: Cycle counting as part of the physical inventory process

- Improve operational efficiency by classifying materials for cycle counting as part of the physical inventory process
- Increase inventory accuracy; for instance, because fast movers can be counted more often
- Manage classifications for materials in stock based on the cycle-counting settings maintained in the self-service configuration UI “Cycle Counting”

The screenshot displays the SAP Physical Inventory Management interface. At the top, there is a navigation bar with the title "Physical Inventory Management" and six main menu items: "Create Physical Inventory Documents", "Process Physical Inventory Count Results", "Request Physical Inventory Recount", "Print Physical Inventory Documents", "Physical Inventory Document Overview", and "Physical Inventory Analysis". Below these, a red box highlights the "Cycle Counting Classification" link, with a red arrow pointing down to the main configuration screen.

The main screen is titled "Cycle Counting - Classification". It features a search bar and several filter fields: "Analytics Start Date" (01.01.2020), "Analytics End Date" (31.01.2020), "Inventory Consumption Group" (000 (STANDARD CONS...)), "Plant" (Plant 1 DE (1010) x), "Material" (TG-D* x), "Material Group", and "Material Type". Below these are fields for "Cycle Counting Indicator", "Consumption Quantity in Period", "Consumption Value in Period", and "Inventory Turnover". A "Go" button is located on the right.

The main table displays a list of materials with columns: "Plant", "Material", "Cycle Counting Indicator", "Cycle Counts per Fiscal Year", "Cycle Counting Indicator Fixed", "Consumption Quantity in Period", "Consumption Value in Period", and "Inventory Turnover". The table is filtered to show "Classified (2)" items. A red arrow points from the "Classify" button in the top right corner of the table to a "Classify" dialog box.

The "Classify" dialog box has two sections: "Cycle Counting Indicator:" and "Cycle Counting Indicator Fixed:". The "Cycle Counting Indicator:" section has a dropdown menu with the option "< Replace Field Values >" selected. The "Cycle Counting Indicator Fixed:" section has a dropdown menu with the option "< Keep Existing Choices >" selected. At the bottom of the dialog, there are "Save" and "Cancel" buttons.

Release Highlights

Quality Management

Quality Management: Resolve internal problems by using the 8D methodology

- Consistent and standardized handling of problems by using the 8D methodology and its predefined process steps
- Achieve transparency on all processes related to the issue
- Identify, correct, and eliminate recurring problems
- Create the problem-solving process with reference to a defect

The screenshot displays the SAP 'Resolve Internal Problems' interface. The left sidebar shows the 'Problem-Solving Steps (8)' list, with 'D5 Defined Corrective Actions' selected. The main area is divided into two panels. The left panel shows 'General Data' for problem 10000000123, with the description 'Mirrors are not working'. The right panel shows 'D5 Defined Corrective Actions' with a table of root causes and a list of quality tasks.

Problem-Solving Steps (8)

- Problem-Solving Step
- D1 Team
- D2 Problem Description
- D3 Containment Actions
- D4 Root Causes
- D5 Defined Corrective Actions
- D6 Implemented Corrective Actions
- D7 Preventive Actions
- D8 Congratulate Your Team

General Data

Problem-Solving Description: Mirrors are not working

Problem-Solving Status: In Process

Material: MAT1 (0000000000000055)

Plant:

Referenced Defects

Defects (1)

D5 Defined Corrective Actions

Root Causes

Causes (2)

Cause	Cause Code	Cause Code Group	Cause Description
Wires are not connected to the mirror 1	Human / Error (0010)	Problem Causes, Defect Causes (QM-CAU)	Wires are not connected to the mirror
Wires were actually not there 2	Procurement (0019)	Problem Causes, Defect Causes (QM-CAU)	Wires were actually not there

Tasks

Quality Tasks (5)

Task	Description	Task Status	Cause	Planned End Date	Planned End Time
259	Of course 1	Created	Wires are not connected to the mirror (1)		00:00:00
295	dsdsd	In Process	Wires were actually not there (2)		00:00:00
277	Will this now be saved?	Completed	Wires were actually not there (2)		00:00:00
265	Connect the wires to the mirror	Completed	Wires are not connected to the mirror (1)		00:00:00
250	This happened during lunch time	Completed	Wires were actually not there (2)	13.11.2019	23:59:59

Administrative Data for Step

Step Created On: 12.11.2019, 10:26:57

Step Created By:

Step Changed On: 12.11.2019, 10:26:57

Step Changed By:

Quality Management: Inspection results recording for serialized materials

- Record the results for characteristics flexibly and effectively in inspection lots for both serialized and non-serialized materials
- Results recording for characteristics with single results in an inspection lot with a serialized material is done on the result details page

The screenshot displays the SAP 'Record Inspection Results' interface for a serialized material. The left sidebar shows the inspection object 'Quan Sing (0010)' with properties: Inspection Lot: 10000000600, Operation: 0010. The main area is divided into 'Specifications' and 'Results' tabs. The 'Results' tab shows the 'Record Results' table with columns: Inspection Result Number, Measured Value, Original Value, Valuation, Attribute, and Insp. Unit No. The table contains five rows of data, all with a 'Valid' valuation. A red box highlights the 'Insp. Unit No.' column, which contains values 1, 2, 4, 5, and 3. The bottom of the interface shows a 'Documents' section with an attachment 'SSSS' and a 'Save' button.

Inspection Result Number	Measured Value	Original Value	Valuation	Attribute	Insp. Unit No.
1	10	10	✓	Valid	1
2	20	20	✓	Valid	2
3	30	30	✓	Valid	4
4	40	40	✓	Valid	5
5	50	50	✓	Valid	3

Release Highlights

Production Planning and Execution

SAP Fiori app to reprocess failed material movements

- List of unsuccessful materials movements along with the related error messages
- Identify why the material movements failed
- Replace the storage location, batch, posting date
- Reprocess failed material movements

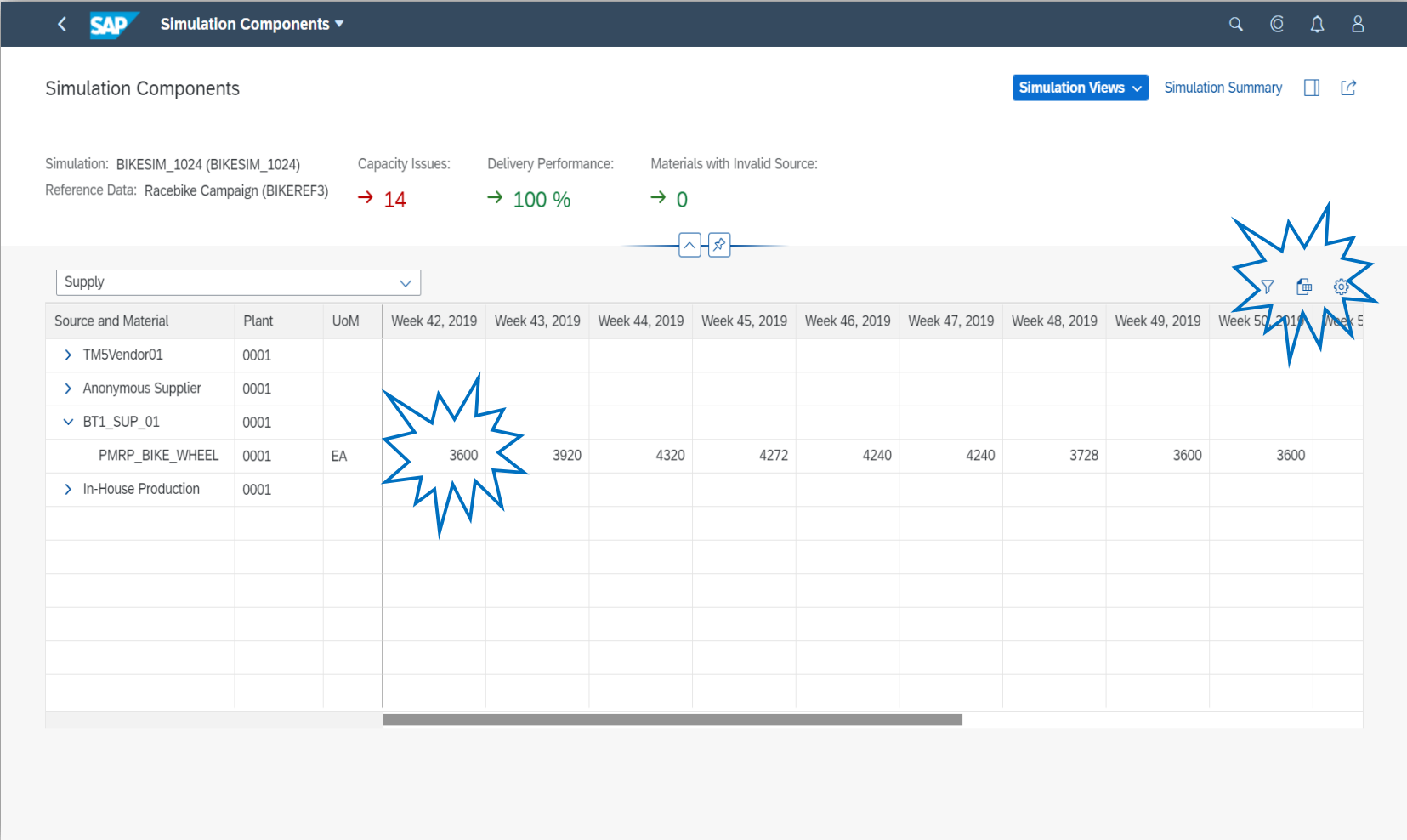
The screenshot displays the 'Reprocess Failed Material Movements' app interface. At the top, there are three input fields for 'Enter New Storage Location', 'Enter New Batch', and 'Enter New Posting Date', each with a 'Replace' and 'Cancel' button. Below these is a table of 'Failed Material Movements (37)'. The table has columns: Material, Plant, Storage Location, Batch, MM Type, Quantity in Unit of Entry, and Error Message. The first row is highlighted in blue. To the right of the table, there are four buttons: 'Replace Storage Location', 'Replace Batch', 'Replace Posting Date', and 'Reprocess'. Red arrows point from these buttons to the corresponding input fields at the top. A red box highlights the 'Replace Storage Location', 'Replace Batch', and 'Replace Posting Date' buttons. A red arrow points from the 'Reprocess' button to the 'Reprocess' button in the top right corner of the app.

Material	Plant	Storage Location	Batch	MM Type	Quantity in Unit of Entry	Error Message
RM27 RAW27,PD,PackagingBox	Plant 1 DK (3210)	Std. storage 2 (321B)		GI for order (261)	100,000 PC	Pipeline material RM27 has no fixed vendor
RM128 RAW128,PD,Consignment	Plant 1 DE (1010)	Std. storage 2 (101B)		GI for order (261)	1,500,000 PC	Posting only possible in periods 2019/12 and 2019/11 in company code 1010
RM124 RAW124,VB,Consumption,FixedBin	Plant 1 US (1710)	Std. storage 2 (171B)		GI for order (261)	100,000 PC	Posting only possible in periods 2019/12 and 2019/11 in company code 1710
WW21-PROD WW SEMI21,PD,RepetitiveManuf.	Plant 1 DE (1010)	Warehouse (105W)		GR goods receipt (101)	3,000 PC	Posting only possible in periods 2019/12 and 2019/11 in company code 1010
WW21-COMPONENT WW SEMI21 component	Plant 1 DE (1010)	Std. storage 2 (101B)		GI for order (261)	2,000 PC	Posting only possible in periods 2019/12 and 2019/11 in company code 1010
RM124 RAW124,VB,Consumption,FixedBin	Plant 1 US (1710)	Std. storage 2 (171B)		GI for order (261)	2,000 PC	Posting only possible in periods 2019/12 and 2019/11 in company code 1710
WW21-PROD WW SEMI21,PD,RepetitiveManuf.	Plant 1 DE (1010)	Warehouse (105W)		GR goods receipt (101)	1,000 PC	Posting only possible in periods 2019/12 and 2019/11 in company code 1010
WW21-PROD WW SEMI21,PD,RepetitiveManuf.	Plant 1 DE (1010)	Warehouse (105W)		GR goods receipt (101)	1,000 PC	Enter the warehouse number.
WW21-PROD WW SEMI21,PD,RepetitiveManuf.	Plant 1 DE (1010)	Warehouse (105W)		GR goods receipt (101)	1,000 PC	Enter the warehouse number.
WW21-PROD WW SEMI21,PD,RepetitiveManuf.	Plant 1 DE (1010)	Warehouse (105W)		GR goods receipt (101)	1,000 PC	Enter the warehouse number.
SEGU_COMPONENT WW SEMI21 component	Plant 1 DE (1010)	Warehouse (105W)		GI for order (261)	2,000 PC	Deficit of SL Unrestricted-use 2- PC : SEGU_COMPONENT 1010 105W
RM128 RAW128,PD,Consignment	Plant 1 DE (1010)	Std. storage 2 (101B)		GI for order (261)	5,000 PC	Pipeline material RM128 has no fixed vendor

Enhancements for predictive material and resource planning (pMRP)

Manage component forecasts for suppliers

- The **Simulation Components** view lists all material components of a simulation
- Switch between the **Materials** and the **Supply** perspectives
- Review **Planned component consumption** based on simulated changes
- Export to **Excel** to share forecast with stakeholders



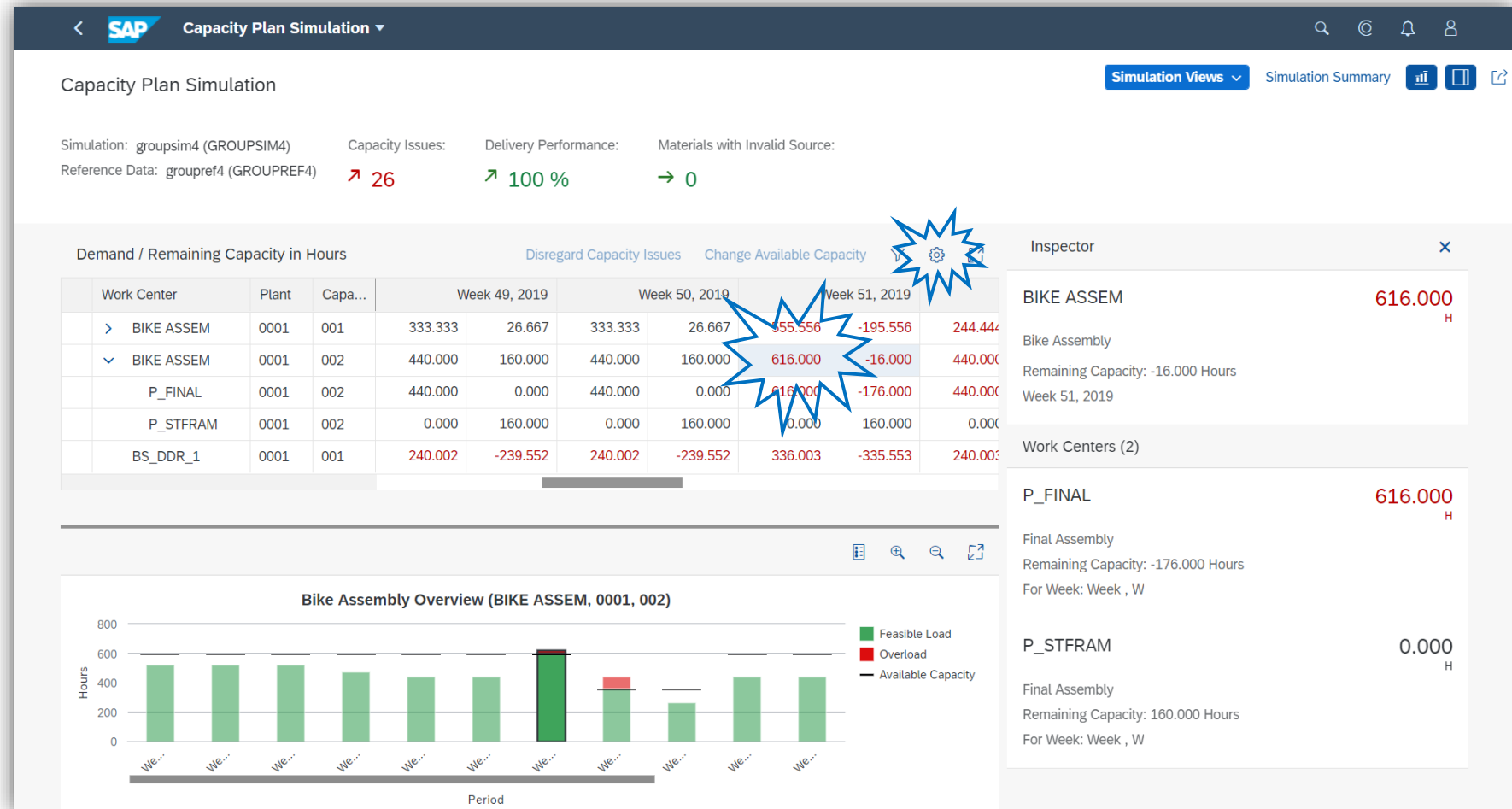
The screenshot displays the SAP Simulation Components interface. At the top, the header shows 'Simulation Components' with a search bar and user icons. Below the header, the simulation details are listed: 'Simulation: BIKESIM_1024 (BIKESIM_1024)', 'Reference Data: Racebike Campaign (BIKERE3)', 'Capacity Issues: → 14', 'Delivery Performance: → 100 %', and 'Materials with Invalid Source: → 0'. A 'Simulation Views' dropdown is visible. The main table is titled 'Supply' and shows a list of sources and materials with their respective forecasts for weeks 42 through 50, 2019. A starburst graphic highlights the value '3600' in the 'Week 42, 2019' column for the material 'PMRP_BIKE_WHEEL'.

Source and Material	Plant	UoM	Week 42, 2019	Week 43, 2019	Week 44, 2019	Week 45, 2019	Week 46, 2019	Week 47, 2019	Week 48, 2019	Week 49, 2019	Week 50, 2019	Week 51, 2019
> TM5Vendor01	0001											
> Anonymous Supplier	0001											
▼ BT1_SUP_01	0001											
PMRP_BIKE_WHEEL	0001	EA	3600	3920	4320	4272	4240	4240	3728	3600	3600	
> In-House Production	0001											

Enhancements for predictive material and resource planning (pMRP)

Aggregated capacity plan for work center groups

- Choose to **group** the capacity plan
- Review the **aggregated** remaining capacity



Enhancements for predictive material and resource planning (pMRP)

Transfer Component Forecast (PIRs) for subassembly planning

- Choose **PIR version** to decide if they are considered for operative MRP

The screenshot displays the SAP Process pMRP Simulations interface. The main table lists active simulations, including 'sim_stfram' and 'BIKESIM_1024'. A 'Release' dialog box is open, allowing the user to configure the release of PIRs. The dialog includes options for 'Create PIRs for' (Demand-Driven MRP Components, Top-Level Materials, Subassembly Components) and a 'Requirement Version' dropdown set to '01 Requirements pl...'. A blue starburst graphic highlights the 'Requirement Version' dropdown. The 'Version Active' radio button is set to 'NO'.

Simulation	Reference Data	Created	Last Changed	Capacity Issues	Delivery Performance	Simulation Status
<input type="checkbox"/> sim_stfram	ref_stfram	07.11.2019	07.11.2019	17	100 %	Created
<input type="checkbox"/> SIM_STFRAM	REF_STFRAM	Christoph Fritzsche	Christoph Fritzsche			
Simulation Summary						
<input type="checkbox"/> BIKESIM_1024	Racebike Campaign	24.10.2019	25.10.2019	14	100 %	Created
<input type="checkbox"/> BIKESIM_1024	BIKERE3	Christoph Fritzsche	Christoph Fritzsche			
Simulation Summary						
<input type="checkbox"/> PEX-TRANSFER-MAT01	PEX-TRANSFER-MAT01	17.10.2019	17.10.2019	0	0 %	Fatal Error
<input type="checkbox"/> PEX-TRANSFER-MAT01	PEX00022	Christoph Fritzsche	Christoph Fritzsche			
<input type="checkbox"/> PEX0002	PEX0002	17.10.2019	17.10.2019	0	0 %	Fatal Error
<input type="checkbox"/> PEX0002SIM	PEX0002	Christoph Fritzsche	Christoph Fritzsche			

Enhancements for Schedule Production

New Filters: Setup Group Key and Category

The screenshot shows the SAP Schedule Production interface. The 'Adapt Filters' dialog is open, displaying various filter categories. The 'Order' category is expanded, and the 'Setup Group Key' and 'Setup Group Category' filters are highlighted with a red rectangle. The 'Basic' section of the dialog includes a search bar, a date range for '*Horizon' (04.11.2019 - 29.11.2019), and fields for 'Work Center', 'Product' (FG1_CP (CP-FG1, Shaft with Rolling Bearings)), and 'Status'. The 'Order' section shows the 'Setup Group Key' and 'Setup Group Category' filters, both with checkboxes for 'Show on Filter Bar'. The 'Product' and 'Work Center' sections also have 'More Filters' links.

Orders (7)

Order	Product	Source of Supply
1000525	FG1_CP	Production Version
4641	FG1_CP	Production Version
6748	FG1_CP	Production Version
6747	FG1_CP	Production Version
6749	FG1_CP	Production Version
6750	FG1_CP	Production Version
4640	FG1_CP	Production Version

Adapt Filters

Search for Filters

Basic

Search

*Horizon: 04.11.2019 - 29.11.2019

Work Center:

Product: FG1_CP (CP-FG1, Shaft with Rolling Bearings)

Status:

Order

Setup Group Key:

Setup Group Category:

Product

Work Center

Dispatch **Deallocate**

Quantity Required	Status	Receipt Date	Latest End	Operation End
0.30 H	Not Dispatched	19.11.2019 07:33:44	19.11.2019 07:33:44	19.11.2019 07:33:44
10.25 H	Dispatched	20.11.2019 09:44:31	20.11.2019 09:44:31	20.11.2019 09:44:31
4.25 H	Dispatched	20.11.2019 14:31:24	20.11.2019 14:31:24	20.11.2019 14:31:24
5.25 H	Dispatched	21.11.2019 11:25:47	21.11.2019 11:25:47	21.11.2019 11:25:47
3.25 H	Not Dispatched	21.11.2019 13:28:08	21.11.2019 13:28:08	21.11.2019 13:28:08
3.75 H	Not Dispatched	25.11.2019 13:05:38	25.11.2019 13:05:38	25.11.2019 13:05:38
5.70 H	Dispatched	26.11.2019 13:24:46	26.11.2019 13:24:46	26.11.2019 13:24:46

Enhancements for Schedule Production

Setup Group Information

SAP Schedule Production

SIVA_TEST * ▾

Search *Horizon: 18.11.2019 - 29.11.2019 Work Center: Product: SIVA_CPS_FP (Test Siva) Status: Adapt Filters (2) Go

⚠ This app is in simulation mode. Your changes will not be saved until you choose Save.

Orders (10)

Order	Product	Source of Supply	Quantity	Work Center	Operation	Action	Capacity Required	Receipt Date	Setup Group Category	Setup Group Key	Latest End	Operation End	Status
11044 Planned Order	SIVA_CPS_FP Test Siva	Production Version (002) Production Version 2	4 PC	SIVA_ALT Spring Winding	0010	Reschedule	2.83 H	20.11.2019 08:30:00	CPS Setup Group Cat (SGC)	Test Setup Group Key (SIVA)	20.11.2019 08:30:00	20.11.2019 08:30:00	Dispatched
11043 Planned Order	SIVA_CPS_FP Test Siva	Production Version (002) Production Version 2	3 PC	SIVA_ALT Spring Winding	0010	Reschedule	2.17 H	20.11.2019 10:45:00	CPS Setup Group Cat (SGC)	Test Setup Group Key (SIVA)	20.11.2019 10:45:00	20.11.2019 10:45:00	Dispatched
11042 Planned Order	SIVA_CPS_FP Test Siva	Production Version (002) Production Version 2	2 PC	SIVA_ALT Spring Winding	0010	Reschedule	1.50 H	20.11.2019 12:15:00	CPS Setup Group Cat (SGC)	Test Setup Group Key (SIVA)	20.11.2019 12:15:00	20.11.2019 12:15:00	Dispatched
11040 Planned Order	SIVA_CPS_FP Test Siva	Production Version (002) Production Version 2	2 PC	SIVA_ALT Spring Winding	0010	Reschedule	1.50 H	20.11.2019 13:45:00	CPS Setup Group Cat (SGC)	Test Setup Group Key (SIVA)	20.11.2019 13:45:00	20.11.2019 13:45:00	Dispatched
11041 Planned Order	SIVA_CPS_FP Test Siva	Production Version (002) Production Version 2	3 PC	SIVA_ALT Spring Winding	0010	Reschedule	2.17 H	20.11.2019 16:00:00	CPS Setup Group Cat (SGC)	Test Setup Group Key (SIVA)	20.11.2019 16:00:00	20.11.2019 16:00:00	Dispatched
11045 Planned Order	SIVA_CPS_FP Test Siva	Production Version (001) Production Version 1	5 PC	SIVA_RES Siva Production Line	0010	Reschedule	4.33 H	25.11.2019 16:00:00	Setup group cat. 1 (1)	setup group 1A (1A)	25.11.2019 16:00:00	25.11.2019 16:00:00	Not Dispatched
11046 Planned Order	SIVA_CPS_FP Test Siva	Production Version (001) Production Version 1	3 PC	SIVA_RES Siva Production Line	0010	Reschedule	2.67 H	26.11.2019 16:00:00	Setup group cat. 1 (1)	setup group 1A (1A)	26.11.2019 16:00:00	26.11.2019 16:00:00	Not Dispatched
11047 Planned Order	SIVA_CPS_FP Test Siva	Production Version (001) Production Version 1	2 PC	SIVA_RES Siva Production Line	0010	Reschedule	1.83 H	27.11.2019 16:00:00	Setup group cat. 1 (1)	setup group 1A (1A)	27.11.2019 16:00:00	27.11.2019 16:00:00	Not Dispatched
11048 Planned Order	SIVA_CPS_FP Test Siva	Production Version (001) Production Version 1	4 PC	SIVA_RES Siva Production Line	0010	Reschedule	3.50 H	28.11.2019 16:00:00	Setup group cat. 1 (1)	setup group 1A (1A)	28.11.2019 16:00:00	28.11.2019 16:00:00	Not Dispatched
11049 Planned Order	SIVA_CPS_FP Test Siva	Production Version (001) Production Version 1	5 PC	SIVA_RES Siva Production Line	0010	Reschedule	4.33 H	29.11.2019 16:00:00	Setup group cat. 1 (1)	setup group 1A (1A)	29.11.2019 16:00:00	29.11.2019 16:00:00	Not Dispatched

3 PC

11042 Planned Order	20.11.2019 12:15:00	1.50 H
Product: SIVA_CPS_FP Test Siva	Latest End: 20.11.2019 12:15:00	Operation Status: Dispatched
Quantity: 2 PC		
11040 Planned Order	20.11.2019 13:45:00	1.50 H
Product: SIVA_CPS_FP Test Siva	Latest End: 20.11.2019 13:45:00	Operation Status: Dispatched
Quantity: 2 PC		
11041 Planned Order	20.11.2019 16:00:00	2.17 H
Product: SIVA_CPS_FP	Latest End:	Operation Status:

11044 Planned Order

Operation: 0010 Operation End: 20.11.2019 08:30:00 Capacity Required: 2.83 H

Product: SIVA_CPS_FP (Test Siva) Latest End: 20.11.2019 08:30:00

Plant: 1010 (Plant 1 DE)

Sourcing Operation Information

Available Sources of Supply ({0})

Source Of Supply	Work Center	Assign
------------------	-------------	--------

Operation Information

Operation Date and Time

Operation Start: 19.11.2019 14:30:00 Operation End: 20.11.2019 08:30:00

Setup Information

Setup Group Key: Test Setup Group Key(SIVA)	Setup Group Category: CPS Setup Group Cat(SGC)
---	--

Enhancements for Schedule Production

Insert Operation

The screenshot shows the SAP Schedule Production interface. At the top, there's a header with the SAP logo and 'Schedule Production' dropdown. Below it, a search bar and filters for 'Horizon' (18.11.2019 - 29.11.2019), 'Work Center', and 'Product' (SIVA_CPS_FP (Test Siva)) are visible. A warning message states: 'This app is in simulation mode. Your changes will not be saved until you choose Save.' Below this is a table of 'Orders (10)' with columns: Order, Product, Source of Supply, Quantity, Work Center, Operation, Action, and Capacity Required. The table lists several orders for 'SIVA_CPS_FP' with various work centers and operations. A 'Set Strategy' dialog box is open in the foreground, with a red arrow pointing to the 'Set Strategy' button in the top right. The dialog has three sections: 'Planning Mode' with a dropdown set to 'Sequence', 'Scheduling Control' with a dropdown set to 'Insert Operation (Finite)', and 'Direction' with a dropdown set to 'Backward'. 'OK' and 'Cancel' buttons are at the bottom of the dialog.

Order	Product	Source of Supply	Quantity	Work Center	Operation	Action	Capacity Required
11044	SIVA_CPS_FP	Production Version (002)	4 PC	SIVA_ALT	0010	Reschedule	2.83
11043	SIVA_CPS_FP	Production Version (002)	3 PC	SIVA_ALT	0010	Reschedule	2.17
11042	SIVA_CPS_FP	Production Version (002)	2 PC	SIVA_ALT	0010	Reschedule	1.50
11040	SIVA_CPS_FP	Production Version (002)	2 PC	SIVA_ALT	0010	Reschedule	1.50
11041	SIVA_CPS_FP	Production Version (002)	3 PC	SIVA_ALT	0010	Reschedule	2.17
11045	SIVA_CPS_FP	Production Version (001)	5 PC	SIVA_RES	0010	Reschedule	4.33
11046	SIVA_CPS_FP	Production Version (001)	3 PC	SIVA_RES	0010	Reschedule	2.67

Enhancements for Schedule Production

Advanced Variant Configuration (AVC) integration

SAP Schedule Production

Standard * ▾

Search *Horizon: 29.09.2019 - 28.11.2019 Work Center: Product: Status:

⚠ This app is not available. Choose Save.

Production Order

Product: CM-FL-V00
Plant: 1010
Quantity: 1 PC
Receipt Date: 21.10.2019
Source of Supply: 0002

[Display Production Order](#)
[Display Variant Configuration](#)

More Links

Source of Supply	Quantity	Work Center	Operation	Action	Operation End	Latest End	Capacity Required	Status
Production Version (0002)	1 PC	ASSEMBLE	0010	Reschedule	21.10.2019 07:22:30	21.10.2019 07:22:30	3.83 H	Not Dispatched
Production Version 2	1 PC	FX1WC_11	0030	Reschedule	22.10.2019 08:16:51	22.10.2019 08:16:51	0.08 H	Not Dispatched
Production Version (0002)	3 PC	ASSEMBLE	0010	Reschedule	22.10.2019 10:22:30	22.10.2019 10:22:30	10.50 H	Not Dispatched
Production Version 2	2 EA	SDW10001	0010	Reschedule	22.10.2019 16:00:00	22.10.2019 16:00:00	7.00 H	Dispatched
Production Version (0001)		Work center Desc						

SAP Variant Configuration

Forklift
CM-FL-V00

Configuration Status: Released
Production Document: 000002000061 / 0001
Order Quantity: 1.000 PC
Order Type: Production Order Processing MTO (YBM4)
Production Plant: Plant 1 DE (1010)

Default Group

Lifter Model	Power Source	Wheel Type	Counterweight
—	Combustion	—	—
Fork Size	Battery Capacity [Ah]		
Normal	—		

Enhancement for Manage Work Center Capacity

New Filter for Work Center Group + Reschedule Button

Standard * ▾

Editing Status:

All ▾

Load Type:

Cumulative Overload ▾

*Evaluation Horizon:

14 Days ▾

Work Center:

Work Center Group:

Adapt Filters (3)

Go

Work Center Capacities (12)

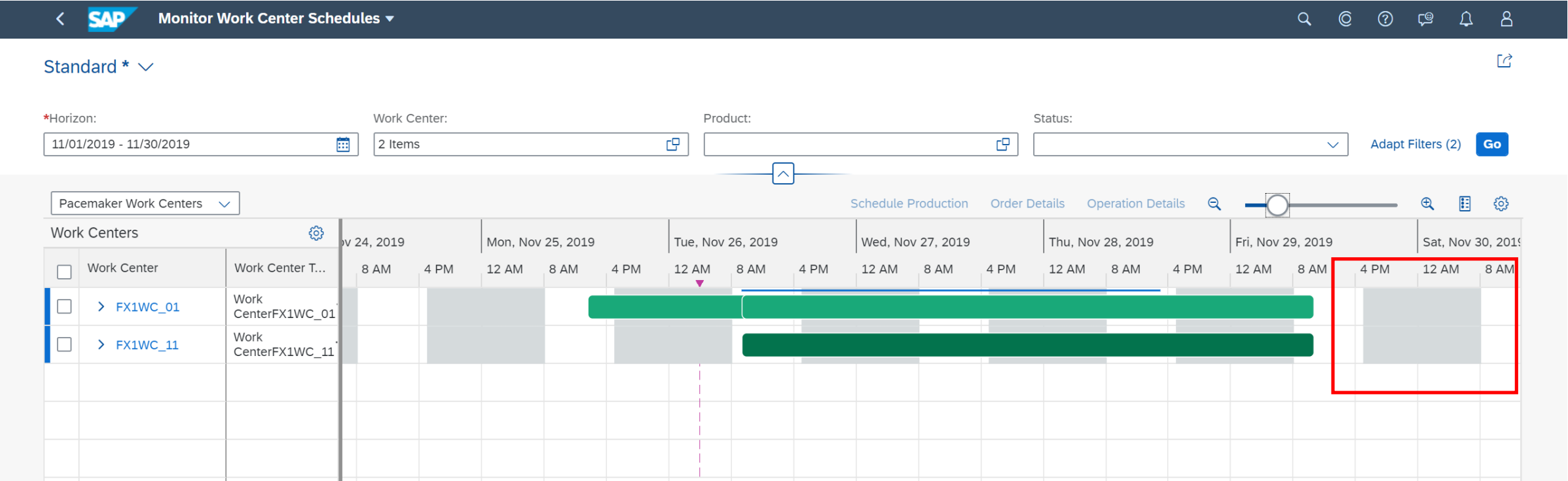
Work Center	Capacity Category	Cumulative Load	Max. Load	First Overload	Overdue	Total Capacity Requirement	Work Center Group	Utilization
Assembly ASSEMBLY Unsaved Changes by _SAPC5274935	Machine (001)	999.99%	999.99%	20.11.2019	623.12 H	603.72 H	2 Groups	
ASSEMBLE ASSEMBLE Draft	Machine (001)	999.99%	695.12%	20.11.2019	1,347.93 H	358.94 H	2 Groups	
Testing TESTING	Machine (001)	808.36%	999.99%	28.11.2019	407 H	239.69 H		
Packing Line 1 PACK01	Machine (001)	290.31%	93.87%		215.79 H	16.46 H		
CP-WC1, Turning 1 TURNING1	Machine (001)	213.51%	300%	20.11.2019	33.33 H	137.48 H		
CP-WC1, Turning 1 TURNING1 Unsaved Changes by John ProdnPlnr	Person (002)	213.51%	300%	20.11.2019	33.33 H	137.48 H		
Work for machine/person WORK	Machine (001)	191.13%	68.47%		196.48 H	78.75 H		
Work center Desc SDW10001 Unsaved Changes by Barath	Machine (001)	170%	100%		56 H	80 H	BS_TEST10	
Work CenterFX1WC_84 FX1WC_84	Machine (001)	147.06%	58.25%		112.99 H	4.66 H		
CP-WC2, Turning 2 TURNING2	Machine (001)	124.76%	200%	28.11.2019	1.33 H	98.48 H		

Work Center Group Details

Name	Description	Group Type Description
DEMO_L	TestDay123	Same Line Groups & Work Centers
GP12345	GP data 123	Alternative Groups & Work Centers

Enhancement for Monitor Work Center Schedules

Non working time



Enhancement for Monitor Work Center Schedules

Process Industry – Operation Detail

SAP Monitor Work Center Schedules

*Horizon: 11/01/2019 - 11/30/2019 | Work Center: 1 Item | Product: | Status: | Adapt Filters (2) Go

Pacemaker Work Centers | Schedule Production | Order Details | Operation Details

Work Centers		CW 46, 2019														CW 47, 2019			
Work Center	Resource	Nov 6	Nov 7	Nov 8	Nov 9	Nov 10	Nov 11	Nov 12	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21		
> MWC10007	Resource process MWC10007																		

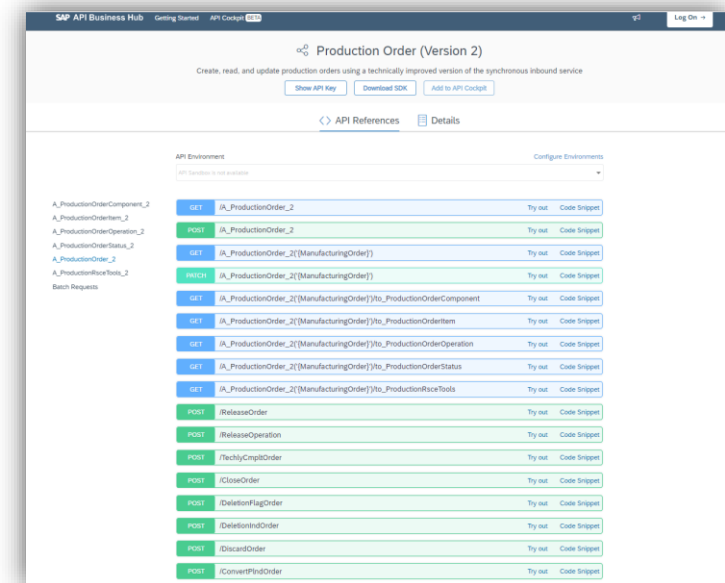
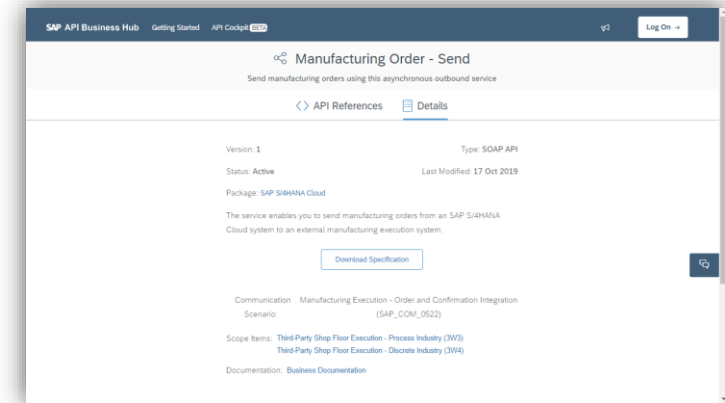
Operation Details

- Product Group: L003
- Receipt Date: 01/30/2020, 22:30:00
- Requirement Date: 01/31/2020
- Source of Supply: 0003
- Number of SoS: 0
- MRP Area: 1010
- MRP Controller: 001

Phase Number	Phase Start	Phase end	Capacity Required
0090	2019.12.23 15:00:00	2020.01.30 17:00:00	200.00 H
0100	2019.11.06 12:00:00	2020.01.30 17:00:00	500.00 H
0110	2019.11.21 13:00:00	2020.01.30 17:00:00	400.00 H

Production Execution: Integration

- **SOAP API [Manufacturing Order – Send](#)** enhanced to handle characteristics, long texts, operation status, additional fields like MaterialsCoProduct, DebitCreditCode, InventorySpecialStockType
- **ODATA API [Production Order \(Version 2\)](#)**
This API is the successor of the deprecated API [Production Order \(Deprecated\)](#). Note: Some improvements in version 2 are incompatible changes compared to version 1.
- OData service based Read API for **Master Recipe**
- OData service based Read API for **Production Routing**



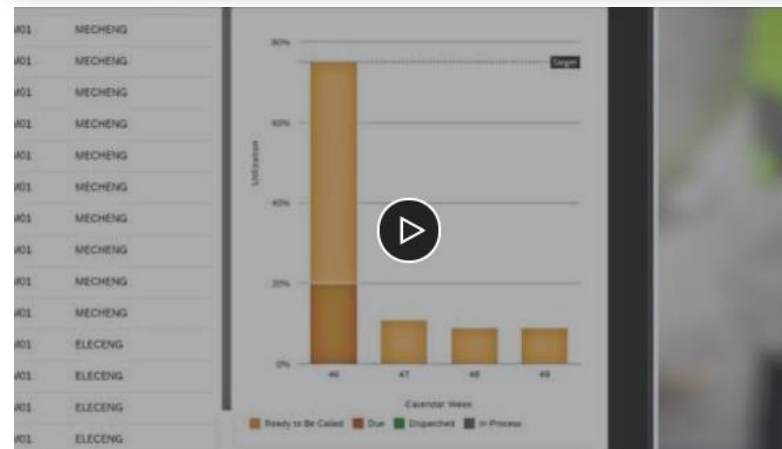
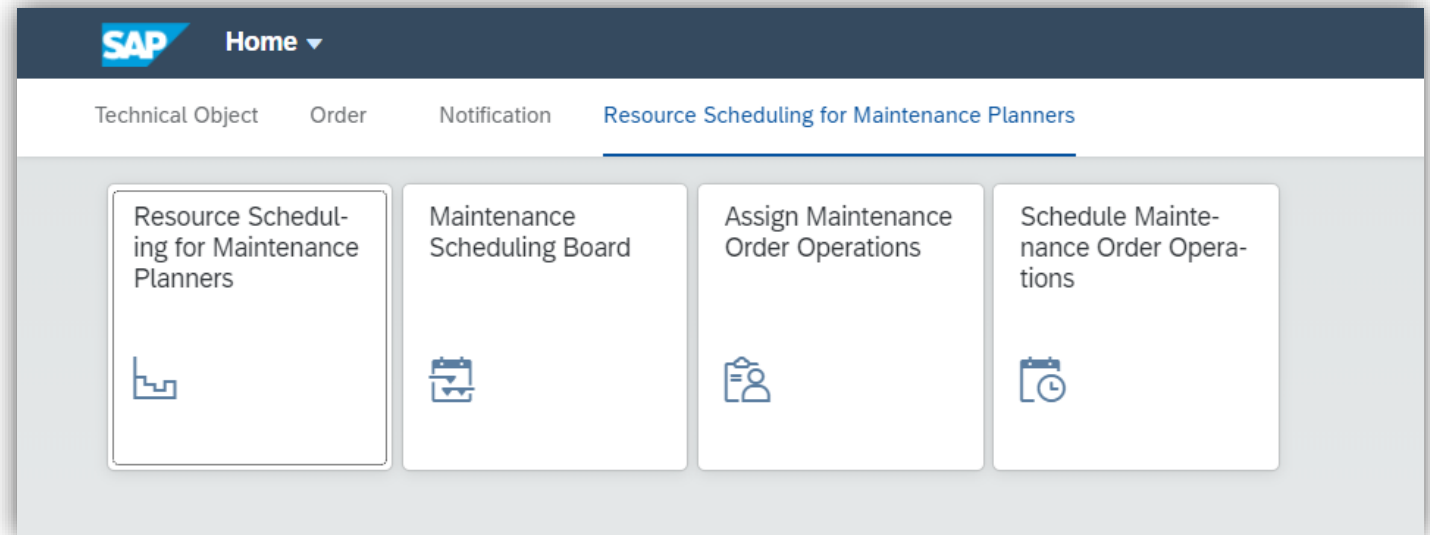
Release Highlights

Asset Management

SAP S/4HANA Cloud for Asset Management

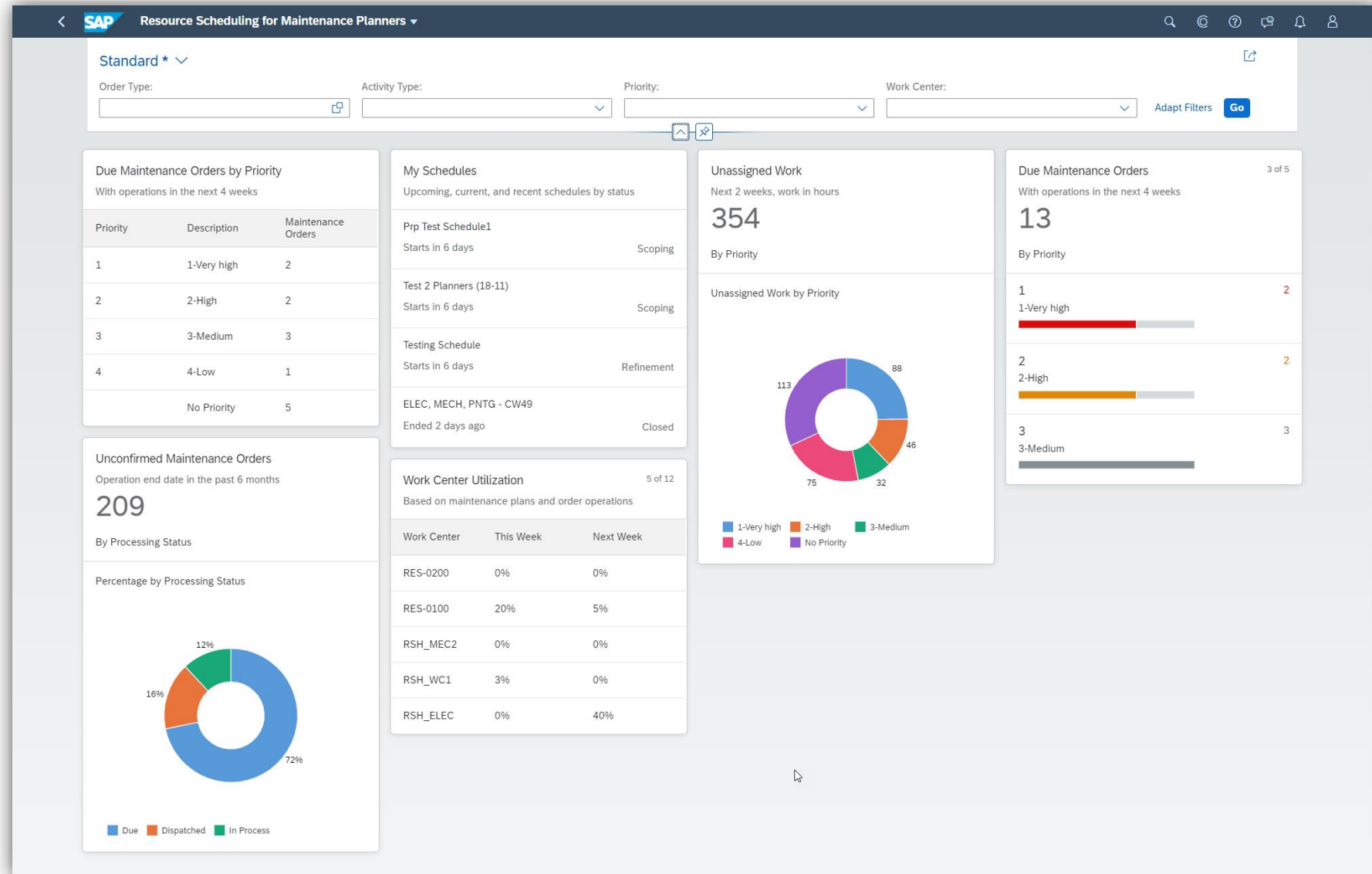
Resource Scheduling for Maintenance Planners

- New SAP Best Practices scope item [43R](#)
- Added value to Asset Management
- Maintenance Scheduling
- Simulations and Versioning
- Collaboration



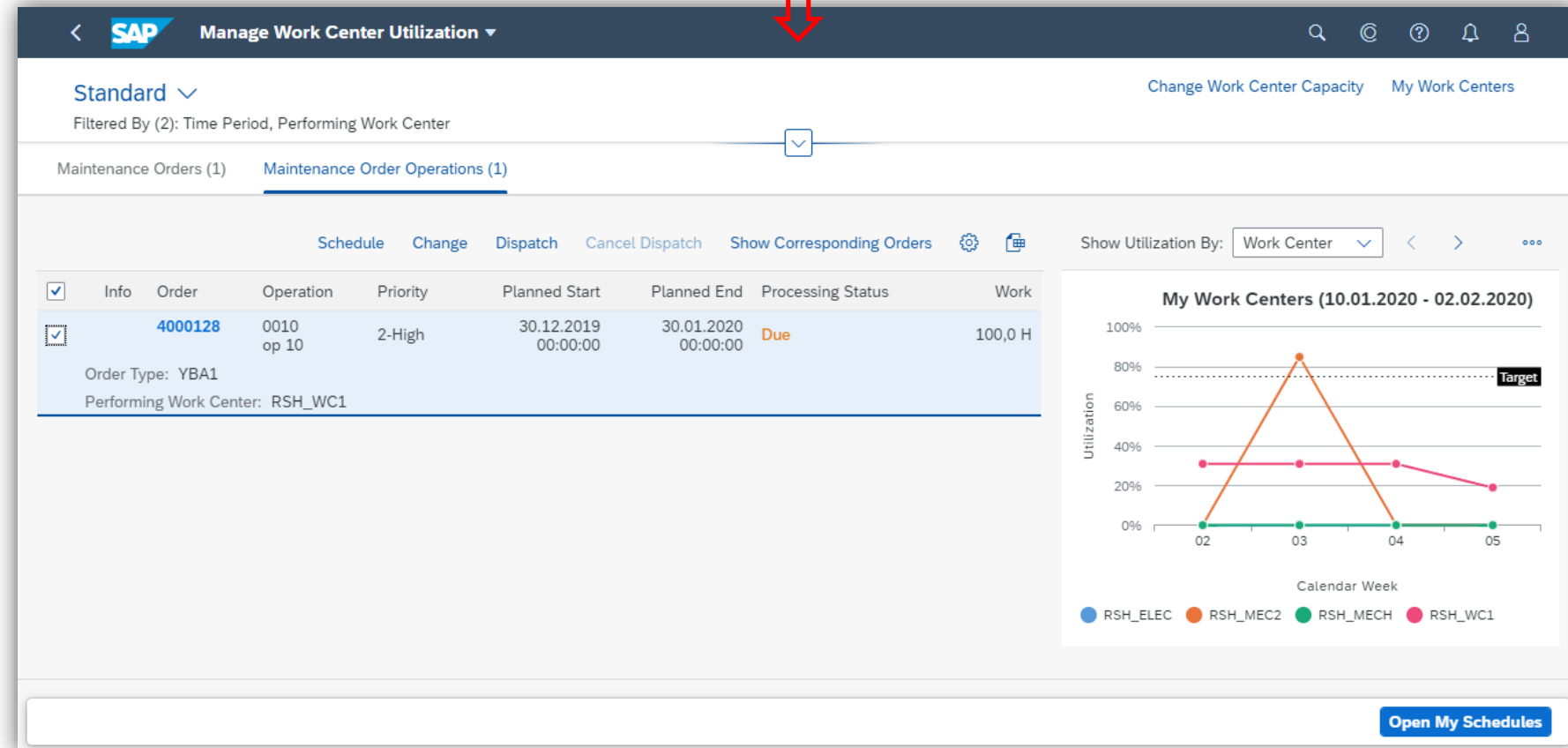
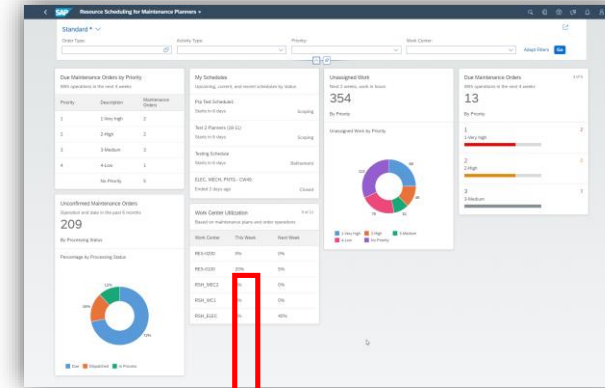
Resource Scheduling for Maintenance Planners

- Overview of important KPIs like due maintenance orders, schedules and work center utilization in real time at a glance
- Monitor important KPIs for your work centers
- Navigation into transactional data



Manage Work Center Utilization

- Analyze and manage the utilization of your work centers
- Visualize utilization based on various attributes, such as work center, processing status, priority, or order type
- Navigate to orders, technical objects, and functional location data
- Dispatch order operations



Schedule Maintenance Order Operations

- Set up schedules for the maintenance order operations
- Monitor and review schedule execution
- Level work center utilization
- Use a graphical view to identify scheduling conflicts

Standard

Search In: Schedule Name a... Start Date: End Date: Schedule Status: >=10.06.2019

Restore Adapt Filters (1) Go

My Schedules (2)

Schedule	Schedule Status	Attainment
Schedule for Calendar Week 38 (1) 16.09.2019 - 22.09.2019	Scoping	0%
Schedule for Calendar Week 38 16.09.2019 - 22.09.2019	Refinement	0%

Schedule for Calendar Week 38 (1)

Change Name and Add Description Schedule Automatically Refine Schedule

Details Time Period: 16.09.2019 - 22.09.2019 Status Scoping

List View Graphical View

Maintenance Order Operations (5) Standard Change Work Center Reset Remove

Order	Operation	Priority	Performing Work Center	Processing Status	Planned Start	Planned End	Work
4029965	0010 Operation 1	No Priority	1909_3_M	Due	28.05.2019 00:00:00	28.05.2019 00:00:00	2,0 H
Order Type: PM01							
4029966	0010 Operation 1	No Priority	1909_3_M	Due	28.05.2019 00:00:00	28.05.2019 00:00:00	2,0 H
Order Type: PM01							
4029971	0010 Operation 1	No Priority	1909_3_M	Due	30.05.2019 00:00:00	30.05.2019 00:00:00	2,0 H
Order Type: PM01							
4029972	0010 Operation 1	No Priority	1909_3_M	Due	30.05.2019 00:00:00	30.05.2019 00:00:00	2,0 H
Order Type: PM01							
4029977	0010 Operation 1	No Priority	1909_3_M	Due	03.06.2019 00:00:00	03.06.2019 00:00:00	2,0 H
Order Type: PM01							

Work Center Utilization

Weekly Forecast (16.09.2019 - 22.09.2019)

Utilization

100% 80% 60% 40% 20% 0%

1909_3_M

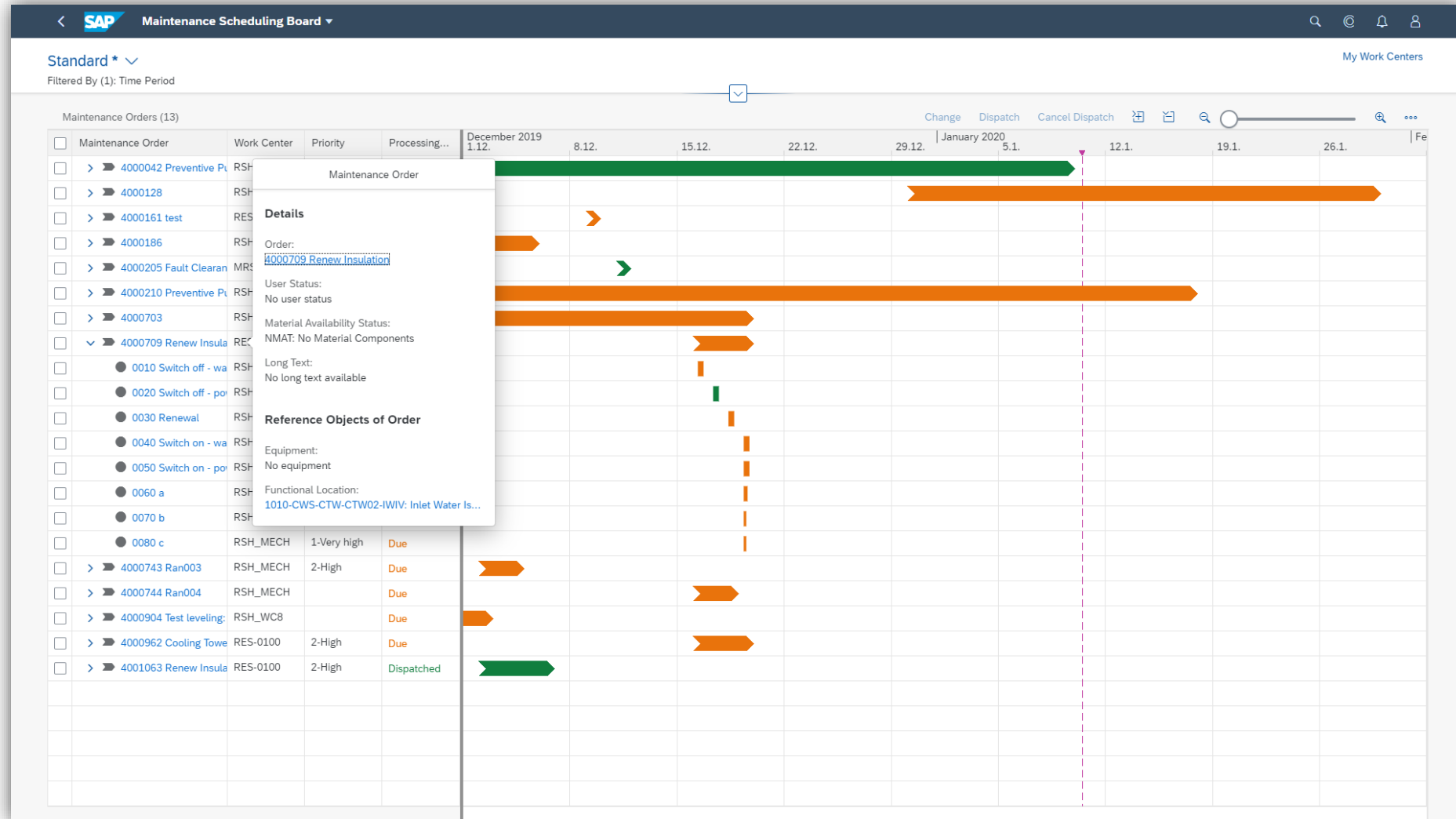
Work Center

Due Scheduled Dispatched In Process

Freeze Schedule Delete Schedule

Maintenance Scheduling Board

- Visualize on a timeline the maintenance orders, order operations, and suboperations in your work centers via Gantt chart
- View relationships between order operations and relationship violations
- Dispatch order operations and suboperations
- Navigate to orders, equipment, and functional location



Assign Maintenance Order Operations

- Manage the personal responsibility of maintenance order operation
- Assign maintenance order operations to a person responsible
- Change or delete assignments

SAP Assign Maintenance Order Operations

Standard * ▾

Time Period*: Date Range (01.12.201... Performing Work Center: ▾ Priority: ▾ Order Type: Activity Type: ▾ Assignment Status: ▾ Person Responsible: [Restore](#) [Adapt Filters \(1\)](#) [Go](#)

Maintenance Order Operations (37) [Assign](#) [Unassign](#) [Reset](#)

<input type="checkbox"/>	Order	Operation	Priority	Performing Work Center	Equipment	Functional Location	Planned Start	Planned End	Work	Assignment Status	Person Responsible	
<input type="checkbox"/>	4000042	Preventive Pump Exchange	0040 Remove	2-High	RSH_MECH	263100091 Cooling Water Circulation Pump	6310-CWS-WCS-CWCP1 Cooling Water Circulation Pump#01	08.01.2020 15:34:00	09.01.2020 15:33:59	16.0 H	Assigned	
<input type="checkbox"/>	4000128	0010 op 10	2-High	RSH_WC1			30.12.2019 00:00:00	30.01.2020 00:00:00	100.0 H	Unassigned		
<input type="checkbox"/>	4000161	0010 test		RSH_WC1		1010-CWS-CTW Cooling Towers	09.12.2019 06:00:00	09.12.2019 08:00:00	0.0 H	Unassigned		
<input type="checkbox"/>	4000186	0010 op 10	1-Very high	RSH_MECH			19.11.2019 08:00:00	05.12.2019 12:30:00	100.0 H	Unassigned		
<input type="checkbox"/>	4000205	0010 OP10	1-Very high	RSH_WC1			11.12.2019 08:00:00	11.12.2019 10:15:00	2.0 H	Unassigned		
<input type="checkbox"/>	4000210	0030 Disconnect	4-Low	RSH_MEC2			13.01.2020 16:00:00	14.01.2020 00:00:00	16.0 H	Unassigned		
<input type="checkbox"/>	4000210	Preventive Pump Exchange 3		RSH_MEC2			14.01.2020 16:00:00	15.01.2020 00:00:00	16.0 H	Unassigned		
<input type="checkbox"/>	4000210	Preventive Pump Exchange		RSH_MEC2			15.01.2020 16:00:00	17.01.2020 00:00:00	32.0 H	Unassigned		
<input type="checkbox"/>	4000210	Preventive Pump Exchange		RSH_MEC2			17.01.2020 16:00:00	17.01.2020 20:00:00	4.0 H	Unassigned		
<input type="checkbox"/>	4000210	Preventive Pump Exchange		RSH_MEC2			20.12.2019 12:30:00	20.12.2019 14:45:00	4.0 H	Unassigned		
<input type="checkbox"/>	4000210	0010 Switch off - water supply		RSH_MEC2			20.12.2019 16:00:00	20.12.2019 20:00:00	8.0 H	Unassigned		
<input type="checkbox"/>	4000703			RSH_MECH			15.11.2019 00:00:00	03.12.2019 12:30:00	100.0 H	Unassigned		
<input type="checkbox"/>	4000703			RSH_MECH			15.11.2019 00:00:00	19.12.2019 17:00:00	200.0 H	Unassigned		
<input type="checkbox"/>	4000709	Renew Insulation	y high	RSH_MECH		1010-CWS-CTW-CTW02-IWIV Inlet Water Isolation Valve	16.12.2019 08:00:00	16.12.2019 17:00:00	8.0 H	Assigned		
<input type="checkbox"/>	4000709	Renew Insulation	y high	RSH_ELEC		1010-CWS-CTW-CTW02-IWIV Inlet Water Isolation Valve	17.12.2019 08:00:00	17.12.2019 17:00:00	8.0 H	Unassigned		
<input type="checkbox"/>	4000709	Renew Insulation	y high	RSH_MECH		1010-CWS-CTW-CTW02-IWIV Inlet Water Isolation Valve	18.12.2019 08:00:00	18.12.2019 17:00:00	8.0 H	Unassigned		
<input type="checkbox"/>	4000709	Renew Insulation	y high	RSH_MECH		1010-CWS-CTW-CTW02-IWIV Inlet Water Isolation Valve	19.12.2019 08:00:00	19.12.2019 17:00:00	8.0 H	Unassigned		
<input type="checkbox"/>	4000709	Renew Insulation	y high	RSH_ELEC		1010-CWS-CTW-CTW02-IWIV Inlet Water Isolation Valve	19.12.2019 08:00:00	19.12.2019 17:00:00	8.0 H	Unassigned		

Maintenance Order Operation

Details

Order: [4000709 Renew Insulation](#)

Operation: 0010 Switch off - water supply

Information Messages: No information messages

User Status: No user status

Long Text: No long text available

Reference Objects of Order

Equipment: No equipment

Functional Location: [1010-CWS-CTW-CTW02-IWIV: Inlet Water Is...](#)

[Save](#) [Cancel](#)

SAP S/4HANA Cloud 2002

Localization

43 Countries **



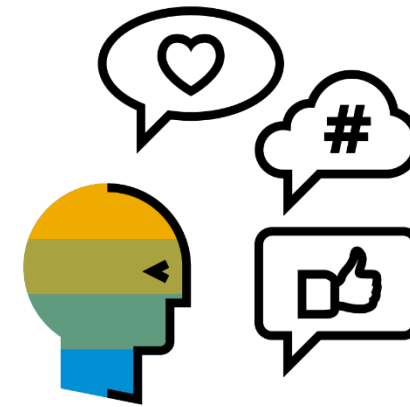
Australia, Austria, Belgium, Brazil, Canada, China, Czechia, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Indonesia, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico (partial scope), Netherlands, New Zealand, Norway, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, Singapore, **Slovakia**^{new}, South Africa, Spain, South Korea, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, United Kingdom, United States



More Information available on Country Versions: Release Information & Restriction Note:

[2785449](#)

25 languages



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** Localized country versions might not include all available solution scope. Please select your country version in the [SAP Best Practices Explorer](#) to see the available solution scope for a specific country. For localization specific features please see the [SAP Help Portal for SAP S/4HANA Cloud](#) and navigate to Product Assistance and Country-Specific Functions

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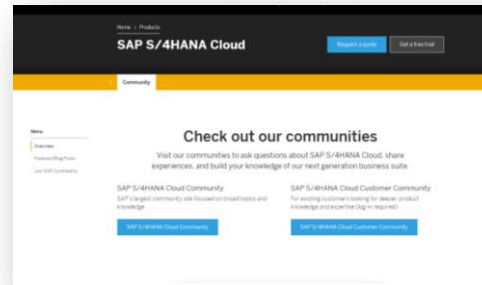
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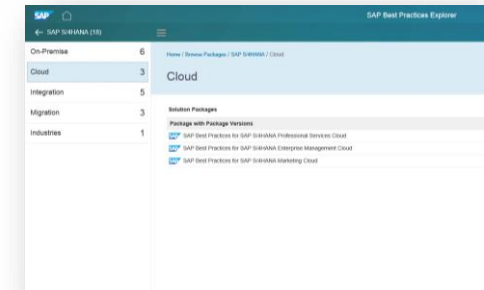
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Thank you.



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